Appendix A – List of end points for the active substance and the representative formulation

Identity, Physical and Chemical Properties, Details of Uses, Further Information (Regulation (EU) N° 283/2013, Annex Part A, points 1.3 and 3.2)

| Active substance (ISO Common Name) | Trifloxystrobin |
|-----------------------------------|-----------------|
| Function (e.g. fungicide)         | Fungicide       |
| Rapporteur Member State           | United Kingdom  |
| Co-rapporteur Member State        | Greece          |

**Identity (Regulation (EU) N° 283/2013, Annex Part A, point 1)**

| Chemical name (IUPAC) | methyl \((E)\)-methoxyimino-\((1-\((\alpha,\alpha,\alpha\text{-trifluoromethyl})\text{-phenyl}\)ethylideneaminoxyl)\)-o-tolylacetate |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Chemical name (CA)     | methyl \((\alpha E)-\alpha-(\text{methoxyimino})\)-2-[[\((E)\)-1-\((3\text{-}(\text{trifluoromethyl})\text{-phenyl})\text{ethylidene}amino\)oxy)methyl]benzeneacetate |
| CIPAC No               | 617                                                                  |
| CAS No                 | 141517-21-7                                                          |
| EC No (EINECS or ELINCS)| Not allocated                                                       |
| FAO Specification (including year of publication) | An FAO specification does not exist |
| Minimum purity of the active substance as manufactured | 975 g/kg |
| Identity of relevant impurities (of toxicological, ecotoxicological and/or environmental concern) in the active substance as manufactured | AE 1344136 (max. 4 g/kg). |
| Molecular formula      | \(C_{20}H_{19}F_3N_2O_4\)                                           |
| Molar mass             | 408.38 \ g/mol                                                      |
| Structural formula     | ![Structural formula](image)                                     |
### Physical and chemical properties (Regulation (EU) N° 283/2013, Annex Part A, point 2)

| Property                                           | Value                                                                 |
|----------------------------------------------------|----------------------------------------------------------------------|
| Melting point (state purity)                       | 72.9 °C (99.7%)                                                      |
| Boiling point (state purity)                       | Approx. 312°C at 101.325 kPa (99.7%) (thermal decomposition starts at about 285°C) |
| Temperature of decomposition (state purity)        | Thermal decomposition starts at approximately 285°C (99.7%)          |
| Appearance (state purity)                          | White powder (99.7%)                                                |
| Vapour pressure (state temperature, state purity)  | 3.4 x 10^-6 Pa at 25°C (99.7%)                                       |
| Henry’s law constant                               | 2.3 x 10^-3 Pa m^3 mol^-1 at 25 °C                                  |
| Solubility in water (state temperature, state purity and pH) | 0.61 mg/L at 25°C with no pH dependence (99.7%) (Trifloxystrobin has no dissociation constant in an accessible pH range) |
| Solubility in organic solvents (state temperature, state purity) | hexane: 11 g/L at 25°C (97.4%)                                      |
|                                                    | 1-octanol: 18 g/L at 25°C (97.4%)                                    |
|                                                    | methanol: 76 g/L at 25°C (97.4%)                                     |
|                                                    | toluene: 500 g/L at 25°C (97.4%)                                     |
|                                                    | ethyl acetate: > 500 g/L at 25°C (97.4%)                             |
|                                                    | acetone: > 500 g/L at 25°C (97.4%)                                   |
|                                                    | dichloromethane: >500 g/L at 25°C (97.4%)                            |
| Surface tension (state concentration and temperature, state purity) | 65.3-66.3 mN/m at 20 ± 0.2 °C (filtrates of 0.1 g/L suspension (97.4%) |
| Partition coefficient (state temperature, pH and purity) | log P_{OW} = 4.5 ± (0.0094) (at 25°C (99.7% pure) no pH dependence) |
| Dissociation constant (state purity)               | Trifloxystrobin does not have a dissociation constant within the range 2 to 12 |
|                                                    | CGA 107170 does not have a dissociation constant within the range 2 to 12 (99.6%) |
| UV/VIS absorption (max.) incl. ε (state purity, pH) | 99.6% purity                                                        |

#### Table: UV/VIS absorption

| Solvent                   | Wavelength [nm] | Absorbance | Molar extinction coefficient [L/mol cm] |
|---------------------------|-----------------|------------|----------------------------------------|
| Methanol                  | 254             | 0.791      | 31097                                  |
|                           | 252             | 0.440      | 17281                                  |
|                           | 290             | 0.041      | 1010                                   |
|                           | 291             | 0.005      | 1375                                   |
|                           | 295             | 0.019      | 746                                    |
|                           | 300             | 0.007      | 275                                    |
|                           | 310             | 0.001      | 39                                     |
|                           | 311             | 0.001      | 39                                     |
|                           | 312             | 0.000      | 0                                      |
| 10 mL of 1M HCl made up to 100 mL with Methanol, c_{HCl} = 0.1 mol/L | 253             | 0.847      | 33367                                  |
|                           | 252             | 0.444      | 17429                                  |
|                           | 291             | 0.098      | 1414                                   |
| 10 mL of 1M NaOH made up to 100 mL with Methanol, c_{NaOH} = 0.1 mol/L | 210             | 0.517      | 12451                                  |
|                           | 219             | 0.547      | 21484                                  |
|                           | 252             | 0.428      | 16810                                  |
|                           | 291             | 0.044      | 1235                                   |

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| Property                          | Description                           |
|----------------------------------|----------------------------------------|
| Flammability (state purity)      | Not considered highly flammable (97.4%)|
| Explosive properties (state purity) | Not considered explosive (97.4%)        |
| Oxidising properties (state purity) | Not considered oxidising (97.4%)       |
Summary of representative uses evaluated, for which all risk assessments needed to be completed (Trifloxystrobin) (Regulation (EU) No 284/2013, Annex Part A, points 3, 4)

Central Europe: Critical GAPs for Representative crops

| Crop and/or situation (a) | Member State | Product Name | Formulation | Application | Application rate per treatment | PHI (days) (l) | Remarks |
|---------------------------|--------------|--------------|-------------|-------------|---------------------------------|--------------|---------|
|                           |              | Trifloxystrobin WG 50 | F G I | Pests or group of pests controlled (c) | Formulation | Application | Application rate per treatment | PHI (days) (l) | Remarks |
|                           |              | Trifloxystrobin WG 50 | F G I | Pests or group of pests controlled (c) | Formulation | Application | Application rate per treatment | PHI (days) (l) | Remarks |
| Central Europe |              | Trifloxystrobin WG 50 | F | GLEOSP, PODOLE, VENTIN, VENTP, ALTEAL, NECTGA | WG 50 % | Tractor mounted/trailed broadcast air assisted sprayer | BBCH 53-87 | 1 - 3 | 10 -14 | 0.005 | 500 - 1500 | 0.025 – 0.075 | 14 | 0.05 kg product / ha and per m crown-high in 500 l water, with MAX 3m crown-high |
| Apple | Germany | Trifloxystrobin WG 50 | F | GLEOSP, PODOLE, VENTIN, VENTP, ALTEAL, NECTGA | WG 50 % | Tractor mounted/trailed broadcast air assisted sprayer | BBCH 53-87 | 1 - 3 | 10 -14 | 0.005 | 500 - 1500 | 0.025 – 0.075 | 14 | 0.05 kg product / ha and per m crown-high in 500 l water, with MAX 3m crown-high |
| Apple | Slovakia | Trifloxystrobin WG 50 | F | PODOLE, VENTIN | WG 50 % | Tractor mounted/trailed broadcast air assisted sprayer | BBCH 31-89 | 1 - 3 | 10 | 0.0075-0.0375 | 200-1000 | 0.075 | 14 | - |
| Grape | Nether lands | Trifloxystrobin WG 50 | F | PLASVI | WG 50 % | Tractor mounted/trailed broadcast air assisted sprayer | BBCH 12-89 | 1 - 3 | 10 | 0.0104-0.0312 | 400-1200 | 0.125 | 14 | Application timing: April to October |
| Grape | Slovakia | Trifloxystrobin WG 50 | F | BOTRCI, CONLDI, PLASVI, UNCINE | WG 50 % | Tractor mounted/trailed broadcast air assisted sprayer | BBCH 14-89 | 1 - 3 | 10 | 0.0125-0.0625 | 200-1000 | 0.125 | 14 | - |
| Grape | Germany | Trifloxystrobin WG 50 | F | UNCINE, PHOPVI, GUIGBI, PSPZTR | WG 50 % | Tractor mounted/trailed broadcast air assisted sprayer | BBCH 13-83 | 1 - 3 | 10 -14 | 0.0075 | 400 - 1600 | 0.03 – 0.12 | 35 | - |
| Grape | Germany | Trifloxystrobin WG 50 | F G | DIPCEA, MYCOFR, SPHRMA | WG 50 % | Tractor mounted/trailed broadcast air assisted sprayer | BBCH 55 - 89 | 1 - 2 | 7 -10 | 0.0075 – 0.015 | 1000 - 2000 | 0.150 | 1 | - |
| -Strawberry | Poland | Trifloxystrobin WG 50 | F | MYCOFR, SPHRMA | WG 50 % | Tractor mounted/trailed equipment: boom sprayer | BBCH 99 treatments of plants after harvest complete |

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### Southern Europe: Critical GAPs for Representative crops

| Crop     | Country | Active Substance | F | Brand Name | Formulation | Country of Origin | Equipment | BBCH | Application Timing | Concentration | Product Rate/ha | Spray Interval | Notes |
|----------|---------|------------------|---|------------|-------------|-------------------|-----------|------|--------------------|---------------|----------------|---------------|-------|
| Apple, Pear | Italy   | Trifloxystrobin | F | PODOLE, VENTIN | WG 50      |                   |           |      |                     |               |                |               |       |
|          |         |                  |   |            |             |                   |           |      |                     |               |                |               |       |
|          | Spain   | Trifloxystrobin | F | PODOLE, VENTIN | WG 50      |                   |           |      |                     |               |                |               |       |
|          |         |                  |   |            |             |                   |           |      |                     |               |                |               |       |
|          | Spain   | Trifloxystrobin | F | UNCINE, GUIGBI | WG 50      |                   |           |      |                     |               |                |               |       |
|          |         |                  |   |            |             |                   |           |      |                     |               |                |               |       |
|          | Spain   | FLINT            | F | UNCINE     | WG 50      |                   |           |      |                     |               |                |               |       |
|          |         |                  |   |            |             |                   |           |      |                     |               |                |               |       |
|          | Spain   | FLINT            | F | DIPCEA, MYCOFR, SPHRMA | WG 50 |                   |           |      |                     |               |                |               |       |

**Application timing:**
- Apple, Pear: April to September
- Grape: May to June
- Strawberry: 0.0125% - 0.015% product/ha

**Spray Interval:**
- 10 day until BBCH 74; 10-14 from BBCH 74 to 85.
Further information, Efficacy

**Effectiveness (Regulation (EU) N° 284/2013, Annex Part A, point 6.2)**

Sufficient information has been provided on the effectiveness of trifloxystrobin for the representative uses.

**Adverse effects on field crops (Regulation (EU) N° 284/2013, Annex Part A, point 6.4)**

Sufficient information has been provided to establish there are no adverse effects for the representative uses.

**Observations on other undesirable or unintended side-effects (Regulation (EU) N° 284/2013, Annex Part A, point 6.5)**

Sufficient information has been provided to establish there are no undesirable effects for the representative uses.

**Groundwater metabolites: Screening for biological activity (SANCO/221/2000-rev.10-final Step 3 a Stage 1)**

| Activity against target organism | CGA 321113 | NOA 413161 | NOA 413163 |
|---------------------------------|------------|------------|------------|
|                                 | no         | no         | no         |
Methods of Analysis

Analytical methods for the active substance (Regulation (EU) N° 283/2013, Annex Part A, point 4.1 and Regulation (EU) N° 284/2013, Annex Part A, point 5.2)

| Analytical technique (key technique and/or method) | Method Details |
|---------------------------------------------------|----------------|
| Technical a.s. (analytical technique)              | HPLC-UV        |
| Impurities in technical a.s. (analytical technique) | HPLC-UV; GC-FID (solvent) |
| Plant protection product (analytical technique)    | GC-FID         |
|                                                   | AE 1344136 : data gap |

Analytical methods for residues (Regulation (EU) N° 283/2013, Annex Part A, point 4.2 & point 7.4.2)

Residue definitions for monitoring purposes

| Environment/Matrix                  | Residue Definitions                                                                 |
|-------------------------------------|-------------------------------------------------------------------------------------|
| Food of plant origin                | Trifloxystrobin                                                                     |
|                                    | Sum of trifloxystrobin and CGA 321113 (M5), expressed as trifloxystrobin            |
| Food of animal origin               | Trifloxystrobin                                                                     |
| Soil                                | Trifloxystrobin                                                                     |
| Sediment                            | At least trifloxystrobin, open regarding CGA 321113                                 |
| Water surface                       | At least trifloxystrobin open regarding CGA 357261, CGA 107170, CGA 373466, NOA 409480, CGA 357276, CGA 381318, Trifloxystrobin, CGA 321113, NOA 413161, NOA 413163 |
| Drinking/ground                     | Trifloxystrobin                                                                     |
| Air                                 | Trifloxystrobin                                                                     |
| Body fluids and tissues             | Sum of trifloxystrobin and CGA 321113, expressed as trifloxystrobin                |
### Monitoring/Enforcement methods

#### Food/feed of plant origin (analytical technique and LOQ for methods for monitoring purposes)

| Analytical Technique | LOQ | Determined |
|----------------------|-----|------------|
| HPLC-UV              | 0.02 mg/kg, high water content (apples, potatoes), high acid content (grape), LOQ 0.01 mg/L grape: wine, juice | parent trifloxystrobin. |
| GC-ECD              | 0.02 mg/kg, dry commodities (wheat and barley grain), high water content (bananas (whole fruit, peel and pulp)), LOQ 0.05 mg/kg (straw) | parent and metabolite CGA 321113. |
| GC-NPD              | 0.02 mg/kg, high water content (apple (whole fruit, juice and pomace), melon, cucumber, potato, banana), high acid content (grape (incl. juice and raisins)) | parent and metabolite CGA 321113. |
| QuEChERES (HPLC-MS/MS) method | LOQ of 0.01 mg/kg in high oil (olive), high protein (kidney bean) and hops, green cone (difficult matrix to analyse) and an LOQ of 0.05 mg/kg in hops, kiln-dried cone | parent trifloxystrobin. |
| QuEChERES (HPLC-MS/MS) method | LOQ of 0.01 mg/kg in high acid, dry, high sugar and high water content (EURL data pool) | parent trifloxystrobin. |

#### Food/feed of animal origin (analytical technique and LOQ for methods for monitoring purposes)

| Analytical Technique | LOQ | Determined |
|----------------------|-----|------------|
| QuEChERES (HPLC-MS/MS) method | LOQ of 0.01 mg/kg in milk, eggs, meat, fat, liver and kidney | parent trifloxystrobin and metabolite CGA 321113. |

#### Soil (analytical technique and LOQ)

| Analytical Technique | LOQ | Determined |
|----------------------|-----|------------|
| HPLC-UV              | 0.01 mg/kg (soil), determined: parent and soil metabolites CGA 321113, 357261, 357262, 331409, 373466. | |
| HPLC-MS/MS          | 0.005 mg/kg soil (Hoefchen, Laacher Hof, Dollendorf); determined: Parent trifloxystrobin | |

#### Water (analytical technique and LOQ)

| Analytical Technique | LOQ | Determined |
|----------------------|-----|------------|
| HPLC-MS/MS          | 0.05 µg/L, determined: parent and Metabolite CGA 321113 (LOQ: 0.05 µg/L) | |
| Data gap: method(s) for the determination of metabolites NOA 413161 and 413163 in drinking water | |
| Method for metabolite CGA 381318 in surface water: open | |

#### Air (analytical technique and LOQ)

| Analytical Technique | LOQ | Determined |
|----------------------|-----|------------|
| GC-ECD              | 2 µg/m³, determined: parent | |
Body fluids and tissues (analytical technique and LOQ)

| Technique   | LOQ      | Determined               |
|-------------|----------|--------------------------|
| GC-ECD      | 0.01 mg/kg (blood, urine) | Parent and metabolite CGA 321113 |
| HPLC-MS/MS  | 50 µg/L (blood plasma)    | Parent and metabolite CGA 321113 |

**Classification and labelling with regard to physical and chemical data (Regulation (EU) No 283/2013, Annex Part A, point 10)**

| Substance   | Classification | Peer review proposal |
|-------------|----------------|----------------------|
| Trifloxystrobin | None           | None                 |

1 Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. OJ L 353, 31.12.2008, 1-1355.

2 It should be noted that harmonised classification and labelling is formally proposed and decided in accordance with Regulation (EC) No 1272/2008.
Impact on Human and Animal Health

Absorption, distribution, metabolism and excretion (toxicokinetics) (Regulation (EU) N° 283/2013, Annex Part A, point 5.1)

| Rate and extent of oral absorption/systemic bioavailability | 60 % (based on urinary (%) and biliary (%) excretion after 48 h at 0.5 mg/kg bw) |
|------------------------------------------------------------|--------------------------------------------------------------------------------|
| Toxicokinetics                                             | 0.5 mg/kg bw [Glyoxyl-Phenyl-U-14C] trifloxystrobin                          |
|                                                           | male       female     |
| Cmax (mg eq/kg)                                            | 0.07       0.07      |
| Tmax (hour)                                                | 12         12         |
| Plasma (hour) T1/2                                         | 48         23         |
| AUC$_{(0-48h)}$(mg hour/kg)                               | 2.7        1.6        |
| 100 mg/kg bw [Glyoxyl-Phenyl-U-14C] trifloxystrobin        | male       female     |
| Cmax (mg eq/kg)                                            | 9.34       6.52      |
| Tmax (hour)                                                | 24         12         |
| Plasma T1/2 (hour)                                         | 50         44         |
| AUC$_{(0-48h)}$(mg hour/kg)                               | 334.6      214.3     |
| Distribution                                               | Widely distributed (highest residues were found in blood, kidneys and liver.) |
| Potential for bioaccumulation                              | No evidence for accumulation                                                 |
| Rate and extent of excretion                               | Rapid and extensive (94-96% within 48 h), mainly via faeces (62-75%) and urine (17-34%) |
| Metabolism in animals                                      | Extensively metabolised (> 95 %)                                             |
|                                                           | Major pathway: ester hydrolysis, O-demethylation of the methoxyamino group, hydroxylation of methyl side chain, cleavage between the glyoxyl phenyl and trifluoromethyl phenyl rings. |

*In vitro* metabolism

| Toxicologically relevant compounds (animals and plants)     | Parent compound. |
|-------------------------------------------------------------|------------------|
| Toxicologically relevant compounds (environment)            | Open for the metabolites (CGA 357262, CGA 357261 and CGA 331409) and CGA 321113 (M5). |

Acute toxicity (Regulation (EU) N° 283/2013, Annex Part A, point 5.2)

| Rat LD$_{50}$ oral                                         | > 5000 mg/kg bw |
|-----------------------------------------------------------|-----------------|
| Rat LD$_{50}$ dermal                                      | > 2000 mg/kg bw |
| Rat LC$_{50}$ inhalation                                  | > 4.6 mg/l air/4h (nose only) |
| Skin irritation                                            | Non-irritant    |
| Eye irritation                                             | Non-irritant    |
| Skin sensitisation                                         | Non-sensitising (weight of evidence based on M&K assay, Buehler assay and LLNA) |
| Phototoxicity                                              | Not phototoxic to BALB/c 3T3 cells |

Short-term toxicity (Regulation (EU) N° 283/2013, Annex Part A, point 5.3)

| Target organ / critical effect                             | Rat: reduced body weight gain and food consumption and liver (increased weight, |
|-----------------------------------------------------------|---------------------------------------------|
### Genotoxicity (Regulation (EU) N° 283/2013, Annex Part A, point 5.4)

**In vitro studies**
- **Ames test**: negative.
- **In vitro mammalian cell gene mutation test**: positive at highly toxic concentration only.
- **In vitro mammalian cell gene mutation test**: negative.
- **In vitro mammalian chromosome aberration test**: negative.
- **In vitro mammalian cell micronucleus test**: negative.
- **In vitro unscheduled DNA synthesis in mammalian cells (TG 482)**: negative.

**In vivo studies**
- **Micronucleus Test (OECD TG 474)**: Negative.

### Photomutagenicity
The requirements for conducting a photomutagenicity were not met.

### Potential for genotoxicity
Trifloxystrobin is unlikely to be genotoxic.

### Long-term toxicity and carcinogenicity (Regulation (EU) N° 283/2013, Annex Part A, point 5.5)

**Long-term effects (target organ/critical effect)**
- Rat: reduced body weight gain
- Mouse: reduced body weight gain, increased liver weight and microscopic changes in the liver

**Relevant long-term NOAEL**
- 2-year, rat: 10 mg/kg bw per day
- 18-month, mouse: 36 mg/kg bw per day

**Carcinogenicity (target organ, tumour type)**
- Rat: hemangiomas in the mesenteric lymph nodes and astrocytomas.
- Mouse: no evidence of a carcinogenic effect.
- Trifloxystrobin is unlikely to pose a carcinogenic hazard to humans.

**Relevant NOAEL for carcinogenicity**
- 2-year, rat: 30 mg/kg bw per day
- 18-month, mouse: 246 mg/kg bw per day

### Reproductive toxicity (Regulation (EU) N° 283/2013, Annex Part A, point 5.6)

**Reproduction toxicity**
- **Parental toxicity**: retarded body weight gain, liver effects (centrilobular hepatocyte hypertrophy) and kidney effects (pigmentation of renal tubules)
- Reproductive toxicity: no adverse effect observed in rat 2-generation study
- Offspring’s toxicity: decreased body weight (gain) during lactation

**Relevant parental NOAEL**
- 2.3 mg/kg bw per day

### Hypertrophy and kidney (increased weight)
- Dog: decreased body weight, reduced food intake, effects on the liver (increased weight, hypertrophy)
- Mouse: liver, spleen.
### Relevant reproductive NOAEL

| Rat: | 73 mg/kg bw per day |
|------|---------------------|
| Rabbit: | 2.3 mg/kg bw per day |

### Developmental toxicity

#### Developmental target / critical effect

| Rat: | Maternal toxicity: decreased body weight gain and food consumption. Developmental toxicity: increased incidences of enlarged thymus |
|------|--------------------------------------------------------------------------------------------------------------------------------|
| Rabbit: | Maternal toxicity: decreased body weight gain and food consumption. Developmental toxicity: increased incidences of skeletal anomalies |

#### Relevant maternal NOAEL

| Rat: | 10 mg/kg bw per day |
|------|---------------------|
| Rabbit: | 50 mg/kg bw per day |

#### Relevant developmental NOAEL

| Rat: | 100 mg/kg bw per day |
|------|---------------------|
| Rabbit: | 50 mg/kg bw per day |

### Neurotoxicity (Regulation (EU) N° 283/2013, Annex Part A, point 5.7)

#### Acute neurotoxicity

| No evidence of neurotoxicity at a single oral dose of 2000 mg/kg bw |

#### Repeated neurotoxicity

| Additional testing conducted as part of the standard 90 day rat study. No evidence of neurotoxicity up to doses equivalent to 127 mg/kg bw/day in males and 618 mg/kg bw/day in females |

#### Additional studies (e.g. delayed neurotoxicity, developmental neurotoxicity)

| None |

### Other toxicological studies (Regulation (EU) N° 283/2013, Annex Part A, point 5.8)

#### Supplementary studies on the active substance

| In an in vitro experiment trifloxystrobin caused a significant, concentration dependent inhibition of mitochondrial respiration. The potential induction of hepatocellular proliferation in rats and mice dosed with trifloxystrobin for 90 days was investigated using PCNA staining. There was no evidence for an induction of hepatocellular proliferation in either species. |

#### Endocrine disrupting properties

| ToxCast in vitro data indicated no estrogen, androgen, thyroid receptors and aromatase mediated activity associated with trifloxystrobin |

#### Studies performed on metabolites or impurities CGA 321113

| Acute oral rat LD₅₀ > 2000 mg/kg bw |
| Ames test: negative. |
| In vitro mammalian cell gene mutation test: negative. |
| In vitro mammalian chromosome aberration test: positive. |
| In vivo micronucleus test: negative. |
| In vivo UDS test (rat hepatocytes): negative |

| Unlikely to be genotoxic in vivo. Comparative in vitro experiment: CGA 321113 caused significantly less inhibition of mitochondrial respiration than trifloxystrobin. Data gap: toxicological profile after repeated exposure |
### NOA 413161

| Test Type | Result |
|-----------|--------|
| Acute oral rat LD<sub>50</sub> | > 2000 mg/kg bw |
| 28-day rat: NOAEL | 150 mg/kg bw per day based on changes in urine parameters |
| Ames test | negative |
| In vitro mammalian cell gene mutation test | negative |
| In vitro mammalian chromosome aberration test | negative |
| Comparative in vitro experiment | CGA 413161 caused significantly less inhibition of mitochondrial respiration than trifloxystrobin |

### NOA 413163

| Test Type | Result |
|-----------|--------|
| Acute oral rat LD<sub>50</sub> | > 2000 mg/kg bw |
| Ames test | negative |
| Comparative in vitro experiment | CGA 413163 caused significantly less inhibition of mitochondrial respiration than trifloxystrobin |

### Mixture NOA 413161/NOA 413163

| Test Type | Result |
|-----------|--------|
| 28-day rat: NOAEL | >1000 mg/kg bw per day |
| In vitro mammalian cell gene mutation test | negative |
| In vitro mammalian chromosome aberration test | negative |

### NOA 373466

| Test Type | Result |
|-----------|--------|
| Acute oral rat LD<sub>50</sub> | > 2000 mg/kg bw |
| Ames test | negative |
| In vitro mammalian cell gene mutation test | negative |
| In vitro mammalian chromosome aberration test | negative |
| Comparative in vitro experiment | CGA 373466 caused significantly less inhibition of mitochondrial respiration than trifloxystrobin |

### CGA 357261

| Test Type | Result |
|-----------|--------|
| Acute oral rat LD<sub>50</sub> | > 2000 mg/kg bw |
| Ames test | negative |
| In vitro mammalian cell micronucleus test | negative |

### NOA 414412 (M12)

| Test Type | Result |
|-----------|--------|
| Acute oral rat LD<sub>50</sub> | > 2000 mg/kg bw |
| Ames test | negative |

### CGA 357262

| Test Type | Result |
|-----------|--------|
| Ames test | negative |
| In vitro mammalian cell micronucleus test | negative |

### CGA 331409

| Test Type | Result |
|-----------|--------|
| Ames test | negative |
| In vitro micronucleus test with human lymphocytes | negative |

### Medical data (Regulation (EU) No 283/2013, Annex Part A, point 5.9)

- Data gap: toxicological profile after repeated exposure
The Applicant has provided information from the Occupational Health Surveillance Programs at its Swiss manufacturing site and an updated paper on cases of potential adverse effects on humans exposed to trifloxystrobin during activities related to its use as a pesticide. The cases reported in humans relate to reports of potential skin irritation and sensitisation. A case reported from South Africa detailed an allergic reaction of one individual against the dry product. The validity of this finding cannot be excluded. A case from the Philippines was likely local skin irritation than sensitisation. Overall, the weight of evidence in humans with more than 120 operators involved in field trials in 11 countries using different formulations of trifloxystrobin and 80 operators involved in field trials in Switzerland, trifloxystrobin products do not have any intrinsic irritation or sensitisation potential to humans. This is in agreement with experience from the medical surveillance on manufacturing site personnel.

### Summary

(Regulation (EU) No\(^\text{1107/2009, Annex II, point 3.1 and 3.6} \))

| Value (mg/kg bw (per day)) | Study | Uncertainty factor |
|----------------------------|-------|-------------------|
| **Acceptable Daily Intake (ADI)** | 0.1 | 2-year rat, | 100 |
| **Acute Reference Dose (ARID)** | 0.5 | rabbit, developmental | 100 |
| **Acceptable Operator Exposure Level (AOEL)** | 0.06 | 2-year rat study, supported by the rat multigeneration study | 160* |
| **Acute Acceptable Operator Exposure Level (AAOEL)** | 0.3 | rabbit, developmental | 160* |

* Including correction for limited oral absorption/bioavailability (60%).

### Reference doses for metabolites (ADI only)

| Value (mg/kg bw (per day)) | Study | Uncertainty factor |
|----------------------------|-------|-------------------|
| **NOA 413161** | 0.15 | Rat 28-day study | 1000 |
| **NOA 413163** | 0.52 | Rat 28-day study with mixture of NOA413161 and NOA413163 and corrected for the content of the metabolite in the mixture | 1000 |

### Dermal absorption

(Regulation (EU) No\(^\text{284/2013, Annex Part A, point 7.3} \))

Representative formulation:
Trifloxystrobin WG 50

0.2% for the neat formulation (500 g/kg); 9% for the low dose (0.04 g/l) based on an in vitro human study with the representative formulation.

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\(^{3}\) If available include also reference values for metabolites
Exposure scenarios (Regulation (EU) No 284/2013, Annex Part A, point 7.2)

| Operators | Critical Use: strawberry (outdoors), tractor mounted equipment, application rate 0.15 kg a.s./ha | Exposure estimates (model): % of AOEI/AAOEI |
|-----------|-------------------------------------------------------------------------------------------------|---------------------------------------------|
|           | UK POEM                                                                                         |                                             |
|           | Without PPE:                                                                                    | 42                                          |
|           | German model                                                                                   |                                             |
|           | Without PPE:                                                                                    | 14                                          |
|           | EFSA Calculator (75<sup>th</sup> perc.)                                                         | 5                                           |
|           | Without PPE:                                                                                    | 7*                                          |
|           | *Indicates exposure as a percentage of the AAOEL                                               |                                             |
|           | Critical Use: grapes, broadcast air assisted sprayer, application rate 0.125 kg a.s./ha         |                                             |
|           | UK POEM                                                                                         |                                             |
|           | Without PPE:                                                                                    | 121                                         |
|           | PPE (gloves m/l & app)                                                                          | 78                                          |
|           | German model                                                                                   |                                             |
|           | No PPE                                                                                         | 25                                          |
|           | EFSA Calculator (75<sup>th</sup> perc.)                                                         | 15                                          |
|           | Without PPE:                                                                                    | 11*                                         |
|           | *Indicates exposure as a percentage of the AAOEL                                               |                                             |
|           | Critical Use: grapes (pome fruit), knapsack equipment, application rate 0.125 kg a.s./ha        |                                             |
|           | UK POEM                                                                                         |                                             |
|           | Without PPE:                                                                                    | 163                                         |
|           | PPE (gloves m/l & app)                                                                          | 80                                          |
|           | German model                                                                                   |                                             |
|           | Without PPE:                                                                                    | 12                                          |
|           | EFSA Calculator (75<sup>th</sup> perc.)                                                         | 28                                          |
|           | Without PPE:                                                                                    | 34*                                         |
|           | *Indicates exposure as a percentage of the AAOEL                                               |                                             |
|           | Tank and lance equipment, application rate 0.125 kg a.s./ha                                     |                                             |
|           | EFSA Calculator (75<sup>th</sup> perc.)                                                         | 28                                          |
|           | Without PPE:                                                                                    | 35                                          |
|           | *Indicates exposure as a percentage of the AAOEL                                               |                                             |
| Critical Use: strawberry (protected), tank and lance sprayer, application rate 0.15 kg a.s./ha |
|---------------------------------------------------------------|
| EUROPOEM                                                      |
| No PPE                                                        |
| 33                                                            |
| ECPA SEGM (High crop, standard)                               |
| No PPE                                                        |
| 16                                                            |

| Critical Use: strawberry (protected), hand held sprayer, application rate 0.15 kg a.s./ha |
|---------------------------------------------------------------|
| EUROPOEM                                                      |
| No PPE                                                        |
| 14                                                            |
| German IVA (low cultures)                                     |
| No PPE                                                        |
| 8                                                             |
| German IVA (high cultures)                                    |
| No PPE                                                        |
| 42                                                            |
| Dutch Greenhouse Model                                         |
| No PPE                                                        |
| 68                                                            |

| Workers |
|---------|
| EUROPOEM II worker re-entry model                             |
| Without PPE:                                                  |
| Pome fruit harvesting                                         |
| 91                                                            |
| Protected Strawberry harvesting                                |
| 54                                                            |
| EFSA Calculator                                               |
| Without PPE:                                                  |
| Pome fruit harvesting                                         |
| 74                                                            |
| Protected Strawberry harvesting                                |
| 97                                                            |
| Higher tier data refinement                                   |
| Grape harvesting                                              |
| 22                                                            |

| Bystanders and residents                                      |
|---------------------------------------------------------------|
| UK Bystander approach:                                       |
| Tractor mounted broadcast air assisted sprayer               |
| Vapour (based on surrogate data)                             |
| 14                                                            |
| Spray drift (based on surrogate data)                        |
| 6                                                             |
| Drift fallout (based on published drift data and EPA SOPs)    |
| 3                                                             |
| Martin et al., 2008:                                         |
| High crop tractor mounted                                    |
| Bystander exposure (at 10 m)                                 |
| 3                                                             |
| Resident exposure (at 10 m)                                  |
| 2                                                             |
Peer review of the pesticide risk assessment of the active substance trifloxystrobin

| EFSA Calculator:                      |                      |
|--------------------------------------|----------------------|
| Upward spraying, vehicle mounted     |                      |
| **Resident (75<sup>th</sup> perc.)** |                      |
| Spray drift                          | 13                   |
| Vapour                               | 2                    |
| Surface deposits                     | 1                    |
| Entry into treated crops             | 8                    |
| All pathways mean                    | 17                   |
| **Bystander (95<sup>th</sup> perc.)**|                      |
| Spray drift                          | 6*                   |
| Vapour                               | <1*                  |
| Surface deposits                     | <1*                  |
| Entry into treated crops             | 2*                   |

*Indicates exposure as a percentage of the AAOEL

Classification with regard to toxicological data (Regulation (EU) N° 283/2013, Annex Part A, Section 10)

Substance:

Harmonised classification according to Regulation (EC) No 1272/2008 and its Adaptations to Technical Process [Table 3.1 of Annex VI of Regulation (EC) No 1272/2008 as amended]

| Trifloxystrobin |                      |
|-----------------|----------------------|
| Skin Sens.1 H317 “May cause an allergic skin reaction |

Peer review proposal for harmonised classification according to Regulation (EC) No 1272/2008:

| Repro Cat. 2 H361; Suspected of damaging fertility of the unborn child |
| H362; May cause harm to breast-fed children |

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4 Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. OJ L 353, 31.12.2008, 1-1355.

5 It should be noted that harmonised classification and labelling is formally proposed and decided in accordance with Regulation (EC) No 1272/2008.
## Residues in or on treated products food and feed

### Metabolism in plants (Regulation (EU) No 283/2013, Annex Part A, points 6.2.1, 6.5.1, 6.6.1 and 6.7.1)

| Primary crops (Plant groups covered) | Crop groups | Crop(s) | Application(s) | DAT (days) |
|--------------------------------------|-------------|---------|----------------|------------|
| **OECD Guideline 501**               |             |         |                |            |
| Fruit crops                          | Apple       | 4 x 100 g as/ha [\(^{14}\)C-GP] and [\(^{14}\)C-TP] | +0 (1 hour) | 14          |
|                                      | Cucumber    | 3 x 312.5 g as/ha [\(^{14}\)C-GP] and [\(^{14}\)C-TP] | 1           | 7           |
| Root crops                           | Sugar beet  | 3 x 130 g as/ha [\(^{14}\)C-GP] and [\(^{14}\)C-TP] | +0 (1 hour) | 21          |
|                                      |             | and 3 applications: 692, 693 & 768 g as/ha [\(^{14}\)C-GP] and [\(^{14}\)C-TP] | 45          |
| Leafy crops                          | -           | -       |                | -          |
| Cereals/grass crops                  | Wheat       | 2 x 250 g as/ha [\(^{14}\)C-GP] and [\(^{14}\)C-TP] | 3           | 35          |
|                                      |             | 2 x 250 g as/ha [\(^{14}\)C-GP] and [\(^{14}\)C-TP] | +0 (1 hour) | 24          |
|                                      |             | 1 x 500 g as/ha (\(^{14}\)C-TP) | 49          |
| Pulses/Oilseeds                      | Peanuts     | 4 x 505 g as/ha [\(^{14}\)C-GP] and [\(^{14}\)C-TP] | +0 days after 1st treatment; 14 days after 1st treatment; 14 days after last treatment. |
| Miscellaneous                        | -           | -       |                | -          |

\[\text{\(^{14}\)C-TP} = \text{trifluoromethyl-phenyl-UL-}\(14\text{C}\) trifloxystrobin\]

\[\text{\(^{14}\)C-GP} = \text{glyoxyl-phenyl-UL-}\(14\text{C}\) trifloxystrobin\]

| Rotational crops (metabolic pattern) | Crop groups | Crop(s) | PBI (days) | Comments |
|--------------------------------------|-------------|---------|------------|----------|
| **OECD Guideline 502**               |             |         |            |          |
| Root/tuber crops                     | Radish      | 31, 120, 365 | Soil treatment using [\(^{14}\)C-TP] and [\(^{14}\)C-GP] trifloxystrobin. |
| Leafy crops                          | Lettuce     | 31, 120, 365 |           |
| Cereal (small grain)                 | Wheat       | 31, 174, 365 |           |
| Other                                 | -           | -       |            |          |

Rotational crop and primary crop metabolism similar? 

Yes

| Processed commodities | Conditions | |
|-----------------------|------------|
(standard hydrolysis study)

| OECD Guideline 507 | 20 min, 90°C, pH 4 | Stable under these conditions |
|--------------------|--------------------|-----------------------------|
|                    | 60 min, 100°C, pH 5 | 2.6% degradation, mainly (2%) to CGA321113 |
|                    | 20 min, 120°C, pH 6 | 21.5% degradation, mainly (ca. 20%) to CGA321113 |

Residue pattern in processed commodities similar to residue pattern in raw commodities?

Yes

Plant residue definition for monitoring (RD-Mo)

OECD Guidance, series on pesticides No 31

Plant residue definition for risk assessment (RD-RA)

Primary Crops: Sum of trifloxystrobin, its 3 isomers (CGA 357262, CGA 357261 and CGA 331409) and CGA 321113 (M5), expressed as trifloxystrobin.

Processed commodities: Sum of trifloxystrobin and CGA 321113 (M5), expressed as trifloxystrobin.

Conversion factor (monitoring to risk assessment)

CFs calculated from the available residue field trials on the representative uses:

- Pome fruit: 1.8
- Grapes: 1.3
- Strawberry: 1.4

Metabolism in livestock (Regulation (EU) Nº 283/2013, Annex Part A, points 6.2.2, 6.2.3, 6.2.4, 6.2.5 6.7.1)

| OECD Guideline 503 and SANCO/11187/2013 rev. 3 (fish) | Animal | Dose (mg/kg bw/d) | Duration (days) | N rate* / comment |
|--------------------------------------------------------|--------|------------------|-----------------|------------------|
|                                                        | Laying hen | 7.7 [14C-TP] | 4 | No N rate since none of the representative crops are fed to poultry. |
|                                                        |          | 6.7 [14C-GP] | 4 |                         |
|                                                        | Goat    | 4.24 [14C-TP] | 4 | - |
|                                                        |          | 4.13 [14C-GP] | 4 |                         |
|                                                        | Pig     | -               | -               | - |
|                                                        | Fish    | -               | -               | - |

\[14C-TP] = [trifluoromethyl-phenyl-UL-14C] trifloxystrobin

\[14C-GP] = [glyoxyl-phenyl-UL-14C] trifloxystrobin

Time needed to reach a plateau concentration in milk and eggs (days)

- Milk: cannot be established
- Eggs: cannot be established

Animal residue definition for monitoring (RD-Mo)

OECD Guidance, series on pesticides No 31

Sum of trifloxystrobin and CGA 321113 (M5), expressed as trifloxystrobin.
### Animal residue definition for risk assessment (RD-RA)

|                      | Ruminants:                                                                 | Poultry:                                                                 |
|----------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|
|                      | Sum of trifloxystrobin and CGA 321113 (M5) (free and conjugated), expressed as trifloxystrobin. | Sum of trifloxystrobin and CGA 321113 (M5) (only free), expressed as trifloxystrobin. |

### Conversion factor (monitoring to risk assessment)

|                        | Ruminants: Calculation not possible from the feeding study since the content of CGA 321113 (M5) conjugates in ruminant matrices was not determined. |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------|
|                        | Poultry: 1 (RD-Mo = RD-RA)                                                                                                      |

### Metabolism in rat and ruminant similar (Yes/No)

|                        | Yes                                                                                                                  |
|------------------------|----------------------------------------------------------------------------------------------------------------------|
| Fat soluble residues   | Yes                                                                                                                  |
| (FAO, 2009)            |                                                                                                                      |

### Residues in succeeding crops (Regulation (EU) N° 283/2013, Annex Part A, point 6.6.2)

| Confined rotational crop study | Based on the results from metabolism studies in rotational crops, which were performed with a higher application rate (0.5 kg a.s./ha) than that intended on the representative crops under consideration (max. 0.3 kg a.s./ha/season for strawberries which is the only representative crop which could be grown in rotation), and application to bare soil (interception by the plants is expected in practice), relevant residue levels are unlikely to occur in rotational crops. |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------|
| (Quantitative aspect)       |                                                                                                                      |
| OECD Guideline 502          |                                                                                                                      |

| Field rotational crop study | Three rotational field trials in lettuce, turnip and wheat conducted with 1128 g/ha (7.5N) at 30d PBI were available. They were analysed for trifloxystrobin and M5 and all the results were below LOQ (0.02 mg/kg). |
|----------------------------|----------------------------------------------------------------------------------------------------------------------|
| OECD Guideline 504         |                                                                                                                      |
Stability of residues (Regulation (EU) N° 283/2013, Annex Part A, point 6.1)
OECD Guideline 506

| Plant products (Category) | Commodity | T (°C) | Stability (Months) |
|--------------------------|-----------|--------|--------------------|
|                          |           |        | Trifloxystrobin    | CGA 321113 | CGA 357261, 357262, 331409 & 373466 |
| High water content       | Corn (green material) | ≤18°C | 24 | 24 | 24 |
|                          | Wheat whole plant¹ | ≤18°C | 24 | 24 | Not tested |
|                          | Cucumber    | ≤18°C | 24 | 24 | Not tested |
|                          | Apple fruit | ≤18°C | 18.5 | See footnote 2 | Not tested |
| High oil content         | Oilseed rape seed | ≤18°C | 24 | 24 | 24 |
|                          | Peanut nutmeat | ≤18°C | 18.5 | See footnote 2 | Not tested |
| High protein content     | Dry beans   | ≤18°C | 24 | 24 | 24 |
| High starch content      | Rye grain   | ≤18°C | 24 | 24 | 24 |
|                          | Wheat grain¹ | ≤18°C | 24 | 24 | Not tested |
|                          | Potato tuber | ≤18°C | 24 | 24 | Not tested |
| High acid content        | Oranges     | ≤18°C | 24 | 24 | 24 |
|                          | Grapes      | ≤18°C | 24 | 24 | Not tested |
| Processed products       | Apple, wet pomace | ≤18°C | 18.5 | See footnote 2 | Not tested |
|                          | Peanut oil  | ≤18°C | 18.5 | See footnote 2 | Not tested |
|                          | Potato granules/flakes | ≤18°C | 18.5 | 18.5 | Not tested |
|                          | Grape juice | ≤18°C | 18.5 | 18.5 | Not tested |
| Others                   | Wheat straw¹ | ≤18°C | 24 | 24 | Not tested |
|                          | Peanut hay  | ≤18°C | 18.5 | See footnote 2 | Not tested |

¹ Recoveries of Trifloxystrobin residues were found to be below 70% in wheat whole plant (at 118 days), in wheat straw (at 357 days) and in wheat grain (at 357 days). It was agreed at the Pesticides Peer Review TC 146 that the degradation of residues in wheat at these time points was mainly related to analytical performance deficiencies instead of an actual degradation of the residues of trifloxystrobin in wheat. Recoveries were acceptable at later time intervals, including at the 24 month storage period.

² Recoveries of CGA 321113 were reported below 70% at several timepoints in apple fruit and apple wet pomace and in peanut nutmeat and peanut hay. It was agreed at the Pesticides Peer Review TC 146 that these studies were not acceptable and since significant variations in the concentrations in these matrices over various timepoints was observed then it was not possible to conclude on the stability of this metabolite in these commodities.
| commodity | (°C) | Trifloxystrobin | CGA 321113 |
|-----------|------|----------------|------------|
| Cow       | ≤20°C | 12             | 12         |
| Cow       | ≤20°C | 3              | 12         |
| Cow       | ≤20°C | 7              | 12         |
| Hen       | ≤20°C | 6              | 12         |
Summary of residues data from the supervised residue trials (Regulation (EU) No 283/2013, Annex Part A, point 6.3) OECD Guideline 509, OECD Guidance, series on pesticides No 66 and OECD MRL calculator

| Crop       | Region/Indoor (a) | Residue levels (mg/kg) observed in the supervised residue trials relevant to the supported GAPs (b) | Recommendations/comments (OECD calculations) | MRL proposals (mg/kg) | HR (mg/kg) (c) | STMR (mg/kg) (d) |
|------------|-------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------------------|-----------------|-----------------|
| **Representative uses** |                   |                                                                                                                  |                                                 |                      |                 |                 |
| Pome fruit | NEU               | Mo: <0.02; 0.03; 0.03; 0.04; 0.04; 0.05; 0.05; 0.06; 0.06; 0.09; 0.11<br>RA: 0.08; 0.10; 0.10; 0.18 | 13 trials that cover Mo residue definition<br>4 trials that cover RA residue definition | 0.15                 | 0.18 (0.11)     | 0.10 (0.05)     |
| Pome fruit | SEU               | Mo: 0.02; 0.05; 0.06; 0.10; 0.12; 0.12; 0.15; 0.17<br>RA: 0.10; 0.20; 0.22; 0.32 | 9 trials that cover Mo residue definition<br>4 trials that cover RA residue definition | 0.30                 | 0.32 (0.17)     | 0.21 (0.1)      |
| Grapes     | NEU               | Mo: 0.14; 0.18; 0.19; 0.29; 0.38; 0.42; 0.42; 0.49<br>RA: 0.15; 0.22; 0.25; 0.37; 0.45; 0.49; 0.60; 0.67 | 8 trials | 1.0              | 0.67 (0.49)     | 0.41 (0.34)     |
| Grapes     | SEU               | Mo: 0.12; 0.12; 0.14; 0.18; 0.20; 0.22; 0.39; 0.51<br>RA: 0.16; 0.17; 0.19; 0.22; 0.25; 0.31; 0.46; 0.60 | 8 trials | 0.8              | 0.60 (0.51)     | 0.24 (0.19)     |
| Strawberry | NEU               | Mo: 0.04; 0.07; 0.08; 0.09; 0.10; 0.13; 0.14; 0.15; 0.15<br>RA: 0.08; 0.12; 0.13; 0.14; 0.18; 0.18; 0.19; 0.20; 0.20 | 9 trials | 0.4              | 0.20 (0.15)     | 0.18 (0.096)    |
| Strawberry | SEU               | Mo: 0.06; 0.08; 0.11; 0.13; 0.15; 0.17; 0.20; 0.20; 0.23<br>RA: 0.11; 0.13; 0.16; 0.18; 0.20; 0.26; 0.26; 0.29 | 9 trials | 0.5              | 0.29 (0.23)     | 0.20 (0.15)     |
| Strawberry | Indoor            | Mo: 0.08; 0.09; 0.10; 0.12; 0.13; 0.16; 0.27; 0.41<br>RA: 0.13; 0.13; 0.14; 0.17; 0.18; 0.20; 0.31; 0.46 | 8 trials | 0.7              | 0.46 (0.41)     | 0.18 (0.13)     |

Summary of the data on formulation equivalence OECD Guideline 509

| Crop       | Region | Residue data (mg/kg) | Recommendations/comments |
|------------|--------|----------------------|-------------------------|
| N/A        |        |                      |                         |

**Summary of data on residues in pollen and bee products** (Regulation (EU) No 283/2013, Annex Part A, point 6.10.1)

| Product(s) | Region | Residue data (mg/kg) | Recommendations/comments |
|------------|--------|----------------------|-------------------------|
| N/A        |        |                      |                         |

Not a current EU requirement as there is no agreed established guidance document.
(a): **NEU** or **SEU** for northern or southern **outdoor** trials in EU member states (**N+SEU** if both zones), **Indoor** for glasshouse/protected crops, **Country** if non-EU location.

(b): Residue levels in trials conducted according to GAP reported in ascending order (e.g. 3x <0.01, 0.01, 0.02, 0.04, 0.08, 3x 0.10, 2x 0.15, 0.17). When residue definition for monitoring and risk assessment differs, use **Mo/RA** to differentiate data expressed according to the residue definition for Monitoring and Risk Assessment.

(c): **HR**: Highest residue. When residue definition for monitoring and risk assessment differs, HR according to residue definition for monitoring reported in brackets (HR<sub>Mo</sub>).

(d): **STMR**: Supervised Trials Median Residue. When residue definition for monitoring and risk assessment differs, STMR according to definition for monitoring reported in brackets (STMR<sub>Mo</sub>).
## Inputs for animal burden calculations

| Feed commodity | Median dietary burden (mg/kg) | Maximum dietary burden (mg/kg) | Comment |
|----------------|--------------------------------|--------------------------------|---------|
| Apple pomace   | 1.42                           | N/A                            | N/A – only STMR considered for this processed commodity |

Median residue (0.12 mg/kg; defined using the risk assessment residue definition for processed commodities as trifloxystrobin + CGA 321113, expressed as trifloxystrobin see Table B.7.3.3-1b) x PF (11.8 as the median processing factor for apple pomace).
### Residues from livestock feeding studies (Regulation (EU) N° 283/2013, Annex Part A, points 6.4.1, 6.4.2, 6.4.3 and 6.4.4)

OECD Guideline 505 and OECD Guidance, series on pesticides No 73

#### MRL calculations

| Highest expected intake (mg/kg bw/d) (mg/kg DM for fish) | Ruminant | Pig/Swine | Poultry | Fish |
|----------------------------------------------------------|----------|-----------|---------|------|
| Beef cattle                                              | 0.017    |           | Breeding| 0.0  |
| Ram/Ewe                                                  | 0.012    |           | Broiler | 0.0  |
| Dairy cattle                                             | 0.014    |           | Finishing| 0.0  |
| Lamb                                                     | 0.015    |           | Layer   | 0.0  |
|                                                                 |          |           |         | Trout| N/A |

#### Intake >0.004 mg/kg bw

|                               | Beef cattle | Dairy cattle | Pig/Swine | Poultry | Fish |
|-------------------------------|-------------|--------------|-----------|---------|------|
| Intake >0.004 mg/kg bw        | Yes         | Yes          | No        | No      | N/A  |
| Feeding study submitted       | Yes         | No           | No        | Yes     | N/A  |

#### Representative feeding level (mg/kg bw/d, mg/kg DM for fish) and N rates

|                    | Level        | Beef: 3.8 N | Level        | Lamb: 4.3 N | N rate |
|--------------------|--------------|-------------|--------------|-------------|--------|
| Ruminant           | 0.065        |             | 0.065        |             |        |
|                    | 0.193        |             | 0.635        |             |        |
| Dairy cattle        |              |             |              |             |        |
| Pig/Swine           |              |             |              |             |        |
| Poultry             |              |             |              |             |        |
| Fish               |              |             |              |             |        |

#### Estimated HR(a) at 1N

|                     | Estimated HR(a) | Estimated HR(a) | Estimated HR(a) | Estimated HR(a) | Estimated HR(a) |
|---------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Muscle              | <0.04           | <0.04           | 0.04*           | N/A             | N/A             |
| Fat                 | <0.04           | <0.04           | 0.04*           | N/A             | N/A             |
| Meat                | <0.04           | <0.04           | 0.04*           | N/A             | N/A             |
| Liver               | <0.04           | <0.04           | 0.04*           | N/A             | N/A             |
| Kidney              | <0.04           | <0.04           | 0.04*           | N/A             | N/A             |
| Milk                | <0.02           | <0.02           | 0.02*           | N/A             | N/A             |
| Eggs                |                 |                 |                 | N/A             | N/A             |

#### Method of calculation(c)

- Estimated HR calculated at 1N level (estimated mean level for milk).

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(a): Estimated HR calculated at 1N level (estimated mean level for milk).
HR in meat calculated for mammalian on the basis of 20% fat + 80% muscle and 10% fat + 90% muscle for poultry.

The OECD guidance document on residues in livestock (series on pesticides 73) recommends three different approaches to derive MRLs for animal products; by applying a transfer factor (Tf), by interpolation (It) or by linear regression (Ln). Fill in method(s) considered to derive the MRL proposals.
## STMR calculations

| Median expected intake (mg/kg bw/d) | Ruminant | Pig/Swine | Poultry | Fish |
|-----------------------------------|----------|-----------|---------|------|
| Beef cattle                        | 0.017    | 0.012     | Breeding | 0.0  |
| Dairy cattle                       | 0.014    | 0.015     | Finishing | 0.0  |
|                                    |          |           | Layer    | 0.0  |
|                                    |          |           | Trout    | N/A  |
|                                    |          |           | Turkey   | 0.0  |

| Representative feeding level (mg/kg bw/d, mg/kg DM for fish) and N rates |
|------------------------------------------------------------------------|
| Level                     | Beef: 3.8 N | Level | Lamb: 4.3 N | Level | N rate | Level | Broiler or Turkey: N |
| 0.065                     | Dairy: 4.8N | 0.065 | Ewe: 5.5 N  | N/A   | N/A     | N/A   | N/A                     |

| Mean level in feeding level | Estimated STMR (b) at 1N | Mean level in feeding level | Estimated STMR (b) at 1N | Mean level in feeding level | Estimated STMR (b) at 1N | Mean level in feeding level | Estimated STMR (b) at 1N |
|-----------------------------|--------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|
| Muscle                      | <0.04                    | <0.04                       | <0.04                    | N/A                         | N/A                      | N/A                         | N/A                      |
| Fat                         | <0.04                    | <0.04                       | <0.04                    | N/A                         | N/A                      | N/A                         | N/A                      |
| Meat (a)                    | <0.04                    | <0.04                       | <0.04                    | N/A                         | N/A                      | N/A                         | N/A                      |
| Liver                       | <0.04                    | <0.04                       | <0.04                    | N/A                         | N/A                      | N/A                         | N/A                      |
| Kidney                      | <0.04                    | <0.04                       | <0.04                    | N/A                         | N/A                      | N/A                         | N/A                      |
| Milk                        | <0.02                    | <0.02                       | <0.02                    | N/A                         | N/A                      | N/A                         | N/A                      |
| Eggs                        |                          |                             |                          |                             |                          |                             |                          |

| Method of calculation (c)   | Tf                       | Tf                           | N/A                      | N/A                         | N/A                      |

(a): STMR in meat calculated for mammalian on the basis of 20% fat + 80% muscle and 10% fat + 90% muscle for poultry
(b): When the mean level is set at the LOQ, the STMR is set at the LOQ.
(c): The OECD guidance document on residues in livestock (series on pesticide 73) recommends three different approaches to derive MRLs for animal products; by applying a transfer factor (Tf), by extrapolation (It) or by linear regression (Ln). Fill in method(s) considered to derive the MRL proposals.
### Processing factors (Regulation (EU) N° 283/2013, Annex Part A, points 6.5.2 and 6.5.3)

**OECD Guideline 508 and OECD Guidance, series on testing and assessment No 96**

| Crop (RAC)/Edible part or Crop (RAC)/Processed product | Number of studies(a) | Processing Factor (PF) | Conversion Factor (CF<sub>P</sub>) for RA (b) |
|--------------------------------------------------------|-----------------------|------------------------|------------------------------------------|
|                                                        |                       | Individual values       | Median PF                                |                                         |
|                                                        |                       |                        |                                         |                                         |
| Pomefruit / washed fruit                                | 8                     | 0.64; 1.19; 1.21; 1.70; 0.91; 0.65; 1.12; 0.82 | 1.01 | N/A |
| Pomefruit / pomace                                       | 8                     | 2.75; 7.86; 12.3; 12.6; 18.6; 16.9; 11.2; 4.92 | 11.8 | N/A |
| Pomefruit / dry pomace                                   | 1                     | 20                     | 21 | N/A |
| Pomefruit / juice                                        | 8                     | 0.17; 0.14; 0.11; 0.07; 0.28; 0.09; 0.06; 0.01 | 0.10 | N/A |
| Pomefruit / puree                                         | 3                     | 0.33; 0.15; 0.12       | 0.15 | N/A |
| Pomefruit / Dried fruit                                  | 2                     | 0.17; 0.31             | 0.40 | N/A |
| Grapes / must                                            | 17                    | 0.15; 0.08; 0.51; 0.50; 0.16; 0.06; 0.57; 0.85; 0.23; 1.17; 0.58; 0.9; 0.06; 0.14; 0.1; 0.4; 0.81 | 0.4 | N/A |
| Grapes / wine                                            | 18                    | 0.06; 0.02; 0.01; 0.18; 0.06; 0.02; 0.02; 0.2; 0.01; 0.11; 0.02; 0.02; 0.06; 0.02; 0.03; 0.13; 0.02; <0.1 | 0.02 | N/A |
| Grapes / juice                                           | 6                     | 0.15; 0.18; 0.14; 0.10; 0.07; 0.15 | 0.14 | N/A |
| Grapes / pomace                                          | 2                     | 5.0; 5.9               | 5.5 | N/A |
| Grapes / raisins                                         | 2                     | 0.59; 2.3              | 1.45 | N/A |
| Strawberry / washed                                     | 4                     | 0.85; 0.65; 0.5; 0.4   | 0.58 | N/A |
| Strawberry / preserve                                    | 4                     | 0.35; 0.3; <0.3; 0.2   | 0.3  | N/A |
| Strawberry / jam                                         | 4                     | 0.8; 0.55; <0.3; 0.3   | 0.43 | N/A |

(a): Studies with residues in the RAC at or close to the LOQ should be disregarded (unless concentration)

(b): When the residue definition for risk assessment differs from the residue definition for monitoring; N/A because calculation of CF not possible, or not meaningful since residues of CGA 321113 were either not determined or were <LOQ, or close to it in the RAC prior to processing.

### Consumer risk assessment (Regulation (EU) N° 283/2013, Annex Part A, point 6.9)

**Including all uses** (representative uses and uses related to an MRL application).

**IMPORTANT NOTE:** The risk assessment is indicative only, considering the proposed residue definition for risk assessment for plant, animal and processed commodities, and pending the outcome of the toxicological evaluation of all components included in the residue definition.

| ADI | 0.1 mg/kg bw per day |
|-----|----------------------|
| TMDI according to EFSA PRIMo | Highest TMDI: N/A see IEDI according to EFSA PRIMo |
| NTMDI, according to (to be specified) | Highest NTMDI: N/A: see NEDI according to UK |
| IEDI (% ADI), according to EFSA PRIMo | Highest IEDI: 3.6% (DE child) |
NEDI (% ADI), according to UK

Factors included in the calculations

ARfD

IESTI (% ARfD), according to EFSA PRIMo

NESTI (% ARfD), according to UK

Factors included in IESTI and NESTI

Proposed MRLs (Regulation (EU) No 283/2013, Annex Part A, points 6.7.2 and 6.7.3)

| Code\(^{(a)}\) | Commodity/Group | MRL/Import tolerance\(^{(b)}\) (mg/kg) and Comments |
|---------------|-----------------|---------------------------------------------|
| 130010        | Apples          | 0.3 | Based on SEU GAP. |
| 130020        | Pears           | 0.3 | Based on SEU GAP. |
| 130030        | Quinces         | 0.3 | Extrapolated from apples/pears data supporting SEU GAP. |
| 151010        | Table grape     | 1.0 | Based on NEU GAP. |
| 151020        | Wine grape      | 1.0 | Based on NEU GAP. |
| 152000        | Strawberry      | 0.7 | Based on protected GAP. |

**Plant commodities**

**Representative uses**

**Animal commodities**

| Code\(^{(a)}\) | Commodity/Group | MRL/Import tolerance\(^{(b)}\) (mg/kg) and Comments |
|---------------|-----------------|---------------------------------------------|
| 1010000 – 1017990; | Animal tissues | 0.04* | No residues expected in animal commodities on the basis of the proposed representative uses. |
| 1020000-1020990; | Milk            | 0.02* | No residues expected in animal commodities on the basis of the proposed representative uses. |
| 1030000-1030990 | Birds’ eggs     | 0.04* | No residues expected in animal commodities on the basis of the proposed representative uses. |

(a): Commodity code number, as listed in Annex I of Regulation (EC) No 396/2005
(b): MRLs proposed at the LOQ, should be annotated by an asterisk (*) after the figure.
Environmental fate and behaviour

Route of degradation (aerobic) in soil (Regulation (EU) No 283/2013, Annex Part A, point 7.1.1.1)

| Characteristic                        | Description                                                                 |
|---------------------------------------|-----------------------------------------------------------------------------|
| Mineralisation after 100 days         | 4-64% after 105-365d [14C-GP]-label (n=8), 57% after 365 days [14C-TP]-label (n=1) |
|                                       | sterile conditions - negligible after 365 d (n=1)                           |
| Non-extractable residues after 100 days| 9-27% after 105-365d [14C-GP]-label (n=8), 27% after 365 days [14C-TP]-label (n=1) |
|                                       | sterile conditions - negligible after 365d (n=1)                            |
| Metabolites requiring further consideration| CGA321113 85-97% at 7-28d (n=9) [14C-GP & TP]-labels                        |
|                                       | NOA 413161 5.3% after 93, 120 days (also seen at 13.6% in dark samples of soil photolysis study) |
|                                       | CGA 357276 5.6%                                                              |

Route of degradation (anaerobic) in soil (Regulation (EU) No 283/2013, Annex Part A, point 7.1.1.2)

| Characteristic                        | Description                                                                 |
|---------------------------------------|-----------------------------------------------------------------------------|
| Mineralisation after 100 days         | Mineralisation negligible                                                   |
| Non-extractable residues after 100 days| Non-extractable residues 7% after 365d                                     |
| Metabolites that may require further consideration for risk assessment - name and/or code, % of applied (range and maximum) | CGA321113 97% after 90 d, (n=1, [14C-GP]-label) |

Route of degradation (photolysis) on soil (Regulation (EU) No 283/2013, Annex Part A, point 7.1.1.3)

| Characteristic                        | Description                                                                 |
|---------------------------------------|-----------------------------------------------------------------------------|
| Metabolites that may require further consideration for risk assessment - name and/or code, % of applied (range and maximum) | CGA321113 57.4% |
|                                       | CGA357261 15.5% after 4 hours                                               |
|                                       | CGA373466 42.5% after 22d                                                   |
|                                       | NOA413163 6.0% after 30d                                                    |
|                                       | NOA409480 9.3% after 21d                                                    |
|                                       | CGA381318 6.2% after 11d                                                    |
| Mineralisation at study end           | Mineralisation 2-5% after 30d                                               |
| Non-extractable residues at study end | Non-extractable residues 7% after 365d                                     |

Rate of degradation in soil (aerobic) laboratory studies active substance (Regulation (EU) No 283/2013, Annex Part A, point 7.1.2.1.1 and Regulation (EU) No 284/2013, Annex Part A, point 9.1.1.1)
| Trifloxystrobin | Dark aerobic conditions |
|----------------|-------------------------|
| Soil and texture type | pH | t. °C / %MWHC | DT$_{50}$ | DT$_{90}$ (d) | DT$_{50}$ (d) | chi$^2$ | Method of calculation |
| Grand Forks / loam | 6.8 | 25 / 75% FC at 1/3 bar | 0.85 | 0.99 | 7.9 | 4.75 | FOMC |
| Gartenacker / silt loam | 7.2 | 19 / 75% FC | 0.49 | 0.45 | 5.1 | 2.23 | FOMC |
| Gartenacker / loam | 7.25 | 19 / 75% FC | 0.41 | 0.37 | 7.2 | 1.35 | SFO |
| Gartenacker A (1ppm) / silt loam | 7.2 | 20 / 60% FC at 1/3 bar | 0.49 | 0.30 | 2.2 | 2.66 | FOMC |
| Gartenacker B 3 (1ppm) / silt loam | 7.2 | 20 / 30% FC at 1/3 bar | 0.89 | 0.33* | 5.7 | 4.31 | FOMC |
| Gartenacker D (0.1ppm) / silt loam | 7.2 | 20 / 60% FC at 1/3 bar | 0.64 | 0.39 | 5.6 | 3.37 | FOMC |
| Neuhofen / loamy sand | 7.85 | 20 / 40% MWHC | 0.57 | 0.31 | 11.92 | 2.75 | FOMC |
| Collombey / loamy sand | 7.65 | 20 / 40% MWHC | 0.73 | 0.44 | 5.39 | 2.9 | FOMC |
| Strassenacker / sandy loam | 8.05 | 20 / 40% MWHC | 0.58 | 0.33 | 4.2 | 2.96 | FOMC |
| Gartenacker / silty loam | 7.2 | 20 / 75% of FC at 1/3 bar | 0.82 | 0.58 | 4.6 | 2.72 | SFO |
| Collombey / loamy sand | 7.65 | 20 / 40% MWHC | 0.46 | 0.26 | 3.6 | 2.9 | FOMC |
| Weide A / sandy loam | 7.5 | 19.2 / 40% MWHC | 0.34 | 0.17 | 2.5 | 2.62 | FOMC |
| Weide B / sandy loam | 7.5 | 19.2 / 40% MWHC | 0.4 | 0.20 | 4.1 | 2.69 | FOMC |
| Collombey / loamy sand | 7.45 | 19.2 / 40% MWHC | 0.44 | 0.19* | 4.8 | 2.84 | FOMC |
| Borstel / sandy loam | 5.14 | 20 / 40% MWHC | 4.35 | 2.83 | 3.0 | 160.3 | DFOP |
| Laacher Hof Wurmwiese / sandy loam | 5.1 | 20.1 / 53.9% MWHC | 0.13 | 0.13 | 4.3 | 0.8 | FOMC |
| Laacher Hof AXXa / sandy loam | 5.9 | 20.1 / 52.9% MWHC | 0.15 | 0.15 | 6.5 | 1.22 | FOMC |
| Hoefchen am Hohenseh 4a / silt loam | 6.2 | 20.1 / 53.3% MWHC | 0.19 | 0.18 | 3.5 | 1.73 | FOMC |
| Dollendorf II / clay loam | 7.1 | 20.1 / 53.9% MWHC | 0.3 | 0.30 | 1.4 | 0.8 | FOMC |
| Gartenacker C (1ppm) / silt loam | 7.2 | 10 / 60% FC at 1/3 bar | 1.05 | 0.25* | 10.6 | 8.46 | FOMC |

**Geometric mean**: 0.34  

*excluded from geometric mean calculation since other studies on the same soil were performed at closer to reference conditions. 

*Normalised using a Q$_{10}$ of 2.58 and Walker equation coefficient of 0.7
Rate of degradation in soil (aerobic) laboratory studies transformation products (Regulation (EU) N° 283/2013, Annex Part A, point 7.1.2.1.2 and Regulation (EU) N° 284/2013, Annex Part A, point 9.1.1.1)

| CGA 321113 | Soil and texture type | pH | t. °C / %MWHC | DT$_{30}$/DT$_{90}$ (d) | DT$_{30}$ (d) 20°C pF2/10kPa$^a$ | Formation fraction † | chi² | Method of calculation |
|------------|----------------------|----|---------------|-------------------------|---------------------------|----------------------|-------|----------------------|
| Grand Forks / loam | 6.8 / n.s. | 25 / 75% FC at 1/3 bar | 257.2 / 853.9 | 299.0 | 0.822 | 7.2 | FOMC-SFO |
| Gartenacker / silt loam | 7.2 / n.s. | 20 / 75% FC | 80.3 / 266.6 | 73.0 | 0.969 | 3.2 | FOMC-SFO |
| Gartenacker / loam | 7.25 / n.s. | 20 / 75% FC | 99.2 / 329.3 | 90.2 | 0.947 | 1.7 | SFO-SFO |
| Gartenacker A / silt loam | 7.2 / n.s. | 20 / 60% FC at 1/3 bar | 120 / 398.2 | 72.3 | 0.951 | 2.3 | FOMC-SFO |
| Gartenacker B / silt loam | 7.2 / n.s. | 20 / 30% FC at 1/3 bar | 262.7 / 872.2 | 97.4* | 1.000 | 2.7 | FOMC-SFO |
| Gartenacker D / silt loam | 7.2 / n.s. | 20 / 60% FC at 1/3 bar | 35.1 / 116.5 | 21.1 | 1.000 | 1.5 | FOMC-SFO |
| Neuhofen / loamy sand | 7.85 / n.s. | 20 / 40% MWHC | 755.6 / >1000 | 406.8 | 0.944 | 1.1 | FOMC-SFO |
| Collombe / loamy sand | 7.65 / n.s. | 20 / 40% MWHC | 428.4 / >1000 | 258.3 | 0.970 | 1.2 | FOMC-SFO |
| Strassenacker / sandy loam | 8.05 / n.s. | 20 / 40% MWHC | 358 / >1000 | 206.3 | 0.946 | 1.5 | FOMC-SFO |
| Gartenacker / silty loam | 7.2 / n.s. | 20 / 75% of FC at 1/3 bar | 386.1 / >1000 | 271.8 | 0.935 | 1.3 | SFO-SFO |
| Collombe / loamy sand | 7.65 / n.s. | 20 / 40% MWHC | 115.3 / 382.8 | 65.4 | 0.913 | 2.1 | FOMC-SFO |
| Weide A / sandy loam | 7.5 / n.s. | 19.2 / 40% MWHC | 112.4 / 373.2 | 55.7 | 1.000 | 2.4 | FOMC-SFO |
| Weide B / sandy loam | 7.5 / n.s. | 19.2 / 40% MWHC | 235 / 780.2 | 116.5 | 0.957 | 2.1 | FOMC-SFO |
| Collombe / loamy sand | 7.45 / n.s. | 19.2 / 40% MWHC | 157.4 / 522.6 | 69.4* | 1.000 | 0.6 | FOMC-SFO |
| Borstel / loamy sand | 5.8 / CaCl$_2$ | 20 / 40% MWHC | 223.2 / 741.0 | 194.5 | N/A | 1.8 | SFO |
| Borstel / sandy loam | 5.14 / KCl | 20 / 40% MWHC | 380.4 / >1000 | 247.6 | 0.983 | 2.7 | DFO-P-SFO |
| Laacher Hof Wurmwiese / sandy loam | 5.1 / CaCl$_2$ | 20.1 / 53.9% MWHC | 70.1 / 232.7 | 70.8 | 0.917 | 4.6 | FOMC-SFO |
| Laacher Hof AXXa / sandy loam | 5.9 / CaCl$_2$ | 20.1 / 52.9% MWHC | 71.6 / 237.7 | 72.3 | 0.996 | 3.6 | FOMC-SFO |
| Hoehehen am Hohenseh 4a / silt loam | 6.2 / CaCl$_2$ | 20.1 / 53.3% MWHC | 55.5 / 184.3 | 52.0 | 0.973 | 1.9 | FOMC-SFO |
| Dollendorf II / clay loam | 7.1 / CaCl$_2$ | 20.1 / 53.9% MWHC | 77.4 / 257.0 | 78.1 | 0.961 | 2.9 | FOMC-SFO |
### Gartenacker

| Soil          | pH  | t. °C / %MWHC | DT$_{50}$/DT$_{90}$ (d) | DT$_{50}$ (d) 20°C pF2/10kPa$^a$ | Formation fraction † | chi$^2$ | Method of calculation |
|---------------|-----|---------------|-------------------------|--------------------------------|----------------------|---------|----------------------|
| C / silt loam | 7.2 | 10 / 60% FC at 1/3 bar | 369.5 / >1000 | 86.3* 0.996 | 4.3 | FOMC-SFO |

**Geometric mean** 122.4

**Arithmetic mean** 0.947

$^a$Normalised using a Q$_{10}$ of 2.58 and Walker equation coefficient of 0.7

formation fractions derived considering trifloxystrobin as the precursor

*excluded from geometric mean calculation since other studies on the same soil were performed at conditions closer to standard reference conditions.

**CGA 357276**

| Soil and texture type | pH   | t. °C / %MWHC | DT$_{50}$/DT$_{90}$ (d) | DT$_{50}$ (d) 20°C pF2/10kPa$^a$ | Formation fraction † | chi$^2$ | Method of calculation |
|-----------------------|------|---------------|-------------------------|--------------------------------|----------------------|---------|----------------------|
| Laacher Hof Wurmwiese / sandy loam | 5.1 / CaCl$_2$ | 20.1 / 53.9% MWHC | n.r. | - | 0.061 | 4.8 | SFO-SFO |
| Laacher Hof AXXa / sandy loam | 5.9 / CaCl$_2$ | 20.1 / 52.9% MWHC | n.r. | - | 0.044 | 6.1 | SFO-SFO |
| Laacher Hof Wurmwiese / sandy loam | 5 / CaCl$_2$ | 19.9 / 55.7% MWHC | 20.2/161 | 65.9 | N/A | 3.2 | HS |
| Laacher Hof AXXa / loamy sand | 6 / CaCl$_2$ | 19.9 / 55.5% MWHC | 21.1/168.5 | 71.2 | N/A | 1.2 | DFOP |
| Hoefchen am Hohenseh 4a / silt loam | 6.4 / CaCl$_2$ | 19.9 / 55% MWHC | 21.4/131.2 | 69.2 | N/A | 2.8 | DFOP |
| Dollendorf II / loam | 7.3 / CaCl$_2$ | 19.9 / 55.4% MWHC | 12 / 71.7 | 21.4 | N/A | 1.8 | FOMC |

**Geometric mean** 51.3

**Arithmetic mean** 0.053

$^a$Normalised using a Q$_{10}$ of 2.58 and Walker equation coefficient of 0.7

† formation fractions derived considering CGA 321113 as the precursor and the DT$_{50}$ of CGA 357276 was fixed to the K2 value from the CGA 357276 metabolite dosed study in the same soil.

For normalised DT$_{50}$ values reported for the bi-phasic models, these represent the conservative pseudo SFO DT$_{90}$/3.32

**NOA 413161**

| Soil and texture type | pH   | t. °C / %MWHC | DT$_{50}$/DT$_{90}$ (d) | DT$_{50}$ (d) 20°C pF2/10kPa$^a$ | Formation fraction † | chi$^2$ | Method of calculation |
|-----------------------|------|---------------|-------------------------|--------------------------------|----------------------|---------|----------------------|
| Laacher Hof Wurmwiese / sandy loam | 5.1 / CaCl$_2$ | 20.1 / 53.9% MWHC | 90.4 / 300.1 | 91.3 | 0.135 | 3.3 | SFO-SFO |
| Laacher Hof AXXa / sandy loam | 5.9 / CaCl$_2$ | 20.1 / 52.9% MWHC | 48.1 / 159.7 | 48.6 | 0.164 | 5.1 | SFO-SFO |
| Hoefchen am Hohenseh 4a / silt loam | 6.2 / CaCl$_2$ | 20.1 / 53.3% MWHC | 35.1 / 116.5 | 32.9 | 0.132 | 4.0 | SFO-SFO |
| Dollendorf II / clay loam | 7.1 / CaCl$_2$ | 20.1 / 53.9% MWHC | 30.9 / 102.6 | 31.2 | 0.213 | 4.7 | SFO-SFO |
| Borstel / | 5.8 / | 20 / 40% | 253.7 / | 221.1 | N/A | 3.6 | SFO-SFO |
| Soil and texture type                              | pH          | t. °C / %MWHC | DT$_{50}$/DT$_{90}$ (d) | DT$_{50}$ (d) 20°C pF2/10kPa | Formation fraction | chi$^2$ | Method of calculation |
|--------------------------------------------------|-------------|---------------|-------------------------|------------------------------|--------------------|---------|-----------------------|
| Loamy sand                                      | CaCl$_2$   |               |                         |                              |                    |         |                       |
| Laacher Hof Wurmwiese / sandy loam               | 5.3 / CaCl$_2$ | 20 / 55%      | MWHC                    | 89.6 / 297.5                 | 89.6               | N/A     | 7.1                   | SFO-SFO |
| Hoechhen am Hohenseh 4a / silty loam             | 6.5 / CaCl$_2$ | 20 / 55%      | MWHC                    | 149.3 / 495.7                | 149.3              | N/A     | 3.3                   | SFO-SFO |
| Dollendorf II / clay loam                        | 7.1 / CaCl$_2$ | 20 / 55%      | MWHC                    | 85 / 282.2                   | 85.0               | N/A     | 2.9                   | SFO-SFO |
| Geometric mean                                   |             |               |                         |                              |                    |         | 76.3 days             |
| Arithmetic mean                                  |             |               |                         |                              |                    |         | 0.161                 |

$a$ Normalised using a $Q_{10}$ of 2.58 and Walker equation coefficient of 0.7

† formation fractions derived considering CGA 321113 as the precursor

| Soil and texture type                              | pH          | t. °C / %MWHC | DT$_{50}$/DT$_{90}$ (d) | DT$_{50}$ (d) 20°C pF2/10kPa | Formation fraction | chi$^2$ | Method of calculation |
|--------------------------------------------------|-------------|---------------|-------------------------|------------------------------|--------------------|---------|-----------------------|
| CGA 357261                                       |             |               |                         |                              |                    |         |                       |
| Laacher Hof Wurmwiese / sandy loam                | 5.1 / CaCl$_2$ | 20.2 / 55    |                          | 0.07/0.23                    | 0.07               | N/A     | 9.7                   | SFO     |
| Laacher Hof AXXa / sandy loam                    | 5.9 / CaCl$_2$ | 20.2 / 55     |                          | 0.07 / 0.23                  | 0.07               | N/A     | 16.0                  | SFO     |
| Hoechhen am Hohenseh 4a / silty loam             | 6.2 / CaCl$_2$ | 20.2 / 55     |                          | 0.1 / 0.33                   | 0.1                | N/A     | 13.9                  | SFO     |
| Dollendorf II / clay loam                        | 7.1 / CaCl$_2$ | 20.2 / 55     |                          | 0.13/0.43                    | 0.13               | N/A     | 10.8                  | SFO     |
| Geometric mean                                   |             |               |                         |                              |                    |         | 0.09                  |
| Arithmetic mean                                  |             |               |                         |                              |                    |         |                       |

|$a$ Normalised using a $Q_{10}$ of 2.58 and Walker equation coefficient of 0.7

† formation fractions derived considering CGA 357261 as the precursor

| Soil and texture type                              | pH          | t. °C / %MWHC | DT$_{50}$/DT$_{90}$ (d) | DT$_{50}$ (d) 20°C pF2/10kPa | Formation fraction | chi$^2$ | Method of calculation |
|--------------------------------------------------|-------------|---------------|-------------------------|------------------------------|--------------------|---------|-----------------------|
| CGA 373466                                       |             |               |                         |                              |                    |         |                       |
| Laacher Hof Wurmwiese / sandy loam                | 5.1 / CaCl$_2$ | 20.2 / 55     |                          | 31.3 / 103.9                 | 31.9               | 0.98    | 4.7                   | FOMC-SFO|
| Laacher Hof AXXa / sandy loam                    | 5.9 / CaCl$_2$ | 20.2 / 55     |                          | 44.6 / 148.1                 | 45.5               | 1.00    | 1.7                   | DFOP-SFO|
| Hoechhen am Hohenseh 4a / silty loam             | 6.2 / CaCl$_2$ | 20.2 / 55     |                          | 44.7 / 148.4                 | 43.2               | 1.00    | 1.9                   | DFOP-SFO|
| Dollendorf II / clay loam                        | 7.1 / CaCl$_2$ | 20.2 / 55     |                          | 72.3 / 240.0                 | 73.7               | 1.00    | 2.5                   | FOMC-SFO|
| Geometric mean                                   |             |               |                         |                              |                    |         | 46.3                  |
| Arithmetic mean                                  |             |               |                         |                              |                    |         |                       |

|$a$ Normalised using a $Q_{10}$ of 2.58 and Walker equation coefficient of 0.7

† formation fractions derived considering CGA 357261 as the precursor

| Soil and texture type                              | pH          | t. °C / %MWHC | DT$_{50}$/DT$_{90}$ (d) | DT$_{50}$ (d) 20°C pF2/10kPa | Formation fraction | chi$^2$ | Method of calculation |
|--------------------------------------------------|-------------|---------------|-------------------------|------------------------------|--------------------|---------|-----------------------|
| NOA 413163                                       |             |               |                         |                              |                    |         |                       |
| Laacher Hof Wurmwiese /                           | 5.1 / CaCl$_2$ | 20.2 / 55    |                          | 76.0 / 252.3                 | 77.4               | 0.23    | 5.0                   | SFO-SFO |
| Soil and texture type                      | pH      | t. °C / %MWHC | DT₅₀ / DT₉₀ (d) | DT₃₀ (d) 20°C pF2/10kPa | Formation fraction | chi² | Method of calculation |
|-------------------------------------------|---------|---------------|-----------------|------------------------|--------------------|------|----------------------|
| Laacher Hof Wurmwiese / sandy loam       | 5.0 / CaCl₂ | 19.4 / 55     | 45.3 / 150.4    | 42.8                   | N/A                | 9.2  | SFO                  |
| Laacher Hof AXXa / sandy loam             | 5.7 / CaCl₂ | 19.4 / 55     | 39.3 / 130.5    | 37.1                   | N/A                | 8.2  | SFO                  |
| Hoechen am Hohenseh 4a / silt loam       | 6.1 / CaCl₂ | 19.4 / 55     | 24.9 / 82.7     | 23.5                   | N/A                | 9.1  | SFO                  |
| Dollendorf II / loam                     | 7.2 / CaCl₂ | 19.4 / 55     | 19.1 / 63.4     | 15.2                   | N/A                | 7.5  | SFO                  |
| Geometric mean                           |         |               |                 |                        |                    | 27.5 |                      |
| Arithmetic mean                          |         |               |                 |                        |                    | N/A  |                      |

a) Normalised using a Q₁₀ of 2.58 and Walker equation coefficient of 0.7

CGA 381318

| Soil and texture type                      | pH      | t. °C / %MWHC | DT₅₀ / DT₉₀ (d) | DT₃₀ (d) 20°C pF2/10kPa | Formation fraction | chi² | Method of calculation |
|-------------------------------------------|---------|---------------|-----------------|------------------------|--------------------|------|----------------------|
| Laacher Hof Wurmwiese / sandy loam       | 5.2 / CaCl₂ | 20.3 / 54.5   | 11.9 / 39.5     | 12.2                   | N/A                | 5.2  | SFO                  |
| Laacher Hof AXXa / loamy sand             | 5.9 / CaCl₂ | 20.3 / 54.5   | 22.8 / 75.7     | 23.5                   | N/A                | 5.0  | SFO                  |
| Hoechen am Hohenseh 4a / silt loam       | 6.2 / CaCl₂ | 20.3 / 54.5   | 22.8 / 75.7     | 23.5                   | N/A                | 4.1  | SFO                  |
| Dollendorf II / loam                     | 7.2 / CaCl₂ | 20.3 / 54.6   | 20.4 / 67.7     | 21.0                   | N/A                | 3.5  | SFO                  |
| Geometric mean                           |         |               |                 |                        |                    | 19.4 |                      |
| Arithmetic mean                          |         |               |                 |                        |                    | N/A  |                      |
a) Normalised using a $Q_{10}$ of 2.58 and Walker equation coefficient of 0.7

Rate of degradation field soil dissipation studies (Regulation (EU) No 283/2013, Annex Part A, point 7.1.2.2.1 and Regulation (EU) No 284/2013, Annex Part A, point 9.1.1.2.1)

| Trifloxystrobin | Aerobic conditions |
|----------------|-------------------|
| Soil type (indicate if bare or cropped soil was used). | Location (country or USA state). | pH<sup>a</sup> | Depth (cm) | DT<sub>50</sub> (d) actual | DT<sub>90</sub> (d) actual | DT<sub>50</sub> (d) Norm<sup>b</sup> | St. ($\chi^2$) (actual / norm) | Kinetic parameter | Method of calculation (actual / norm) |
| 0-100 cm – Loam | Wipperfuerth (Germany) | 0-30 cm – 4.3 30-50 cm – 4.5 50-75 cm – 4.7 75-100cm - 4.7 | 100 | 2.36 | 35.6 | 1.13 | 12.6 / 27.1 | $K_1$ 9.555 $K_2$ 0.052 | DFOP / DFOP |
| Grass | 0-75 cm – Sandy Loam | Wellesbourne (United Kingdom) | 0-30 cm – 5.7 30-50 cm – 5.6 50-75 cm – 6.1 75-100cm - 7.0 | 100 | 6.65 | 22.1 | 1.66 | 17.9 / 16.5 | K 0.1042 | SFO / SFO |
| 75-100 cm – Sandy Clay Loam | Grass | 0-100 cm – Silt Loam | Chilly (Northern France) | 0-30 cm – 6.7 30-50 cm – 6.7 50-75 cm – 6.7 75-100cm - 6.9 | 100 | 6.02 | 20.0 | 1.69 | 22.6 / 28.8 | K 0.4367 | SFO / SFO |
| Grass | 0-30 cm – Silt Loam | St. Etienne du Gres (Southern France) | 0-30 cm – 7.8 30-50 cm – 7.8 50-75 cm – 7.8 75-100cm - 7.8 | 100 | 6.71 | 22.3 | 2.73 | 12.9 / 9.0 | K 0.4559 | SFO / SFO |
| 30-100 cm – Silty Clay Loam | Grass | 0-50 cm – Loam | Vilobi d’Onyar (Spain) | 0-30 cm – 6.2 30-50 cm – 6.4 50-75 cm – 6.4 75-100cm - 6.5 | 100 | 1.76 | 10.4 | 1.10 | 11.2 / 19.5 | $\alpha$ 0.5157 $\beta$ 3.333 | FOMC / SFO |
| 50-100 cm – Sandy Clay Loam | Grass | 0-50 cm – Silty Clay Loam | Albaro (Italy) | 0-30 cm – 7.3 30-50 cm – 7.4 50-75 cm – 7.4 75-100cm - 7.3 | 100 | 3.33 | 14.7 | 2.49 | 9.27 / 13.5 | $\alpha$ -0.131 $\beta$ -0.169 | FOMC / SFO |

Geometric mean (if not pH dependent): 1.69

pH dependence, Yes or No: No

<sup>a</sup>Measured in CaCl<sub>2</sub>

<sup>b</sup>Normalised using a $Q_{10}$ of 2.58 and Walker equation coefficient of 0.7
| CGA 321113 | Aerobic conditions |
|------------|--------------------|
| Soil type (indicate if bare or cropped soil was used). | Location (country or USA state). | pH | Depth (cm) | DT<sub>50</sub> (d) actual | DT<sub>90</sub>(d) actual | St. (χ²) (norm) | DT<sub>50</sub> (d) Norm<sup>h</sup>. | Formation fraction † | Method of calculation (norm) |
| 0-100 cm – Loam Grass | Wipperfuerth (Germany) | 0-30 cm – 4.3 | 30-50 cm – 4.5 | 50-75 cm – 4.7 | 75-100cm– 4.7 | 100 | 8.9 | 52.4 | 0.680 | DFOP-SFO |
| 0-75 cm – Sandy Loam 75-100 cm – Sandy Clay Loam Grass | Wellesbourne (United Kingdom) | 0-30 cm – 5.7 | 30-50 cm – 5.6 | 50-75 cm – 6.1 | 75-100cm– 7.0 | 100 | 9.5 | 24.7 | 0.830 | SFO-SFO |
| 0-100 cm – Silt Loam Grass | Chilly (Northern France) | 0-30 cm – 6.7 | 30-50 cm – 6.7 | 50-75 cm – 6.7 | 75-100cm– 6.9 | 100 | 16.8 | 53.0 | 0.556 | SFO-SFO |
| 0-30 cm – Silt Loam 30-100 cm – Silty Clay Loam Grass | St. Etienne du Gres (Southern France) | 0-30 cm – 7.8 | 30-50 cm – 7.8 | 50-75 cm – 7.8 | 75-100cm– 7.8 | 100 | 19.1 | 95.8 | 0.668 | SFO-SFO |
| 0-50 cm – Loam 50-100 cm – Sandy Clay Loam Grass | Vilobi d’Onyar (Spain) | 0-30 cm – 6.2 | 30-50 cm – 6.4 | 50-75 cm – 6.4 | 75-100cm– 6.5 | 100 | 28.5 | 23.7 | 0.488 | SFO-SFO |
| 0-50 cm – Silty Clay Loam 50-75 cm – Silty Clay 75-100 cm – Clay Loam Grass | Albaro (Italy) | 0-30 cm – 7.3 | 30-50 cm – 7.4 | 50-75 cm – 7.4 | 75-100cm– 7.3 | 100 | 15.2 | 79.8 | 1.00 | SFO-SFO |

Geometric mean (if not pH dependent) 48.1
Arithmetic mean 0.707
Aerobic conditions

| CGA 321113 | Soil type (indicate if bare or cropped soil was used). | Location (country or USA state). | pH\(^a\) | Depth (cm) | DT\(_{50}\) (d) actual | DT\(_{90}\) (d) actual | St. (χ\(^2\)) (norm) | DT\(_{50}\) (d) Norm\(^b\). | Formation fraction \(\dagger\) | Method of calculation (norm) |
|-------------|-----------------------------------------------------|----------------------------------|----------|------------|----------------------|----------------------|----------------------|------------------|-----------------------------|-----------------------------|
|             |                                                     | pH dependence, Yes or No         |          |            |                      |                      |                      |                  |                              |                             |
|             |                                                     | No                                |          |            |                      |                      |                      |                  |                              |                             |

\(^a\) Measured in CaCl\(_2\)

\(^b\) Normalised using a Q\(_{10}\) of 2.58 and Walker equation coefficient of 0.7

\(\dagger\) formation fractions derived considering trifloxystrobin as the precursor
| CGA 357276 | Aerobic conditions |
|-------------|-------------------|
| Soil type (indicate if bare or cropped soil was used). | Location (country or USA state). | pH<sup>a</sup> | Depth (cm) | DT<sub>50</sub> (d) actual | DT<sub>90</sub>(d) actual | St. ($\chi^2$) (norm) | DT<sub>90</sub> (d) Norm<sup>b</sup> | Formation fraction † | Method of calculation (norm) |
| 0-100 cm – Loam Grass | Wipperfürth (Germany) | 0-30 cm – 4.3 30-50 cm – 4.5 50-75 cm – 4.7 75-100cm – 4.7 | 100 | 20.1 | 36.5 | 0.072 | SFO-SFO |
| 0-75 cm – Sandy Loam 75-100 cm – Sandy Clay Loam Grass | Wellesbourne (United Kingdom) | 0-30 cm – 5.7 30-50 cm – 5.6 50-75 cm – 6.1 75-100cm – 7.0 | 100 | 2.8 | 80.2<sup>*</sup> | * | SFO |
| 0-100 cm – Silt Loam Grass | Chilly (Northern France) | 0-30 cm – 6.7 30-50 cm – 6.7 50-75 cm – 6.7 75-100cm – 6.9 | 100 | 7.9 | 36.1 | 0.062 | SFO-SFO |
| 0-50 cm – Loam 50-100 cm – Sandy Clay Loam Grass | Vilobi d’Onyar (Spain) | 0-30 cm – 6.2 30-50 cm – 6.4 50-75 cm – 6.4 75-100cm – 6.5 | 100 | 19.7 | 45.5<sup>*</sup> | * | SFO |
| 0-50 cm – Silty Clay Loam 50-75 cm – Silty Clay 75-100 cm – Clay Loam Grass | Albaro (Italy) | 0-30 cm – 7.3 30-50 cm – 7.4 50-75 cm – 7.4 75-100cm – 7.3 | 100 | 23.2 | 76.5 | 0.032 | SFO-SFO |

Geometric mean (if not pH dependent) 51.7
Arithmetic mean 0.055

<sup>a</sup> Measured in CaCl<sub>2</sub>
<sup>b</sup> Normalised using a $Q_{10}$ of 2.58 and Walker equation coefficient of 0.7
† formation fractions derived considering CGA 321113 as the precursor
*Top down fit of the decline curve from maximum observed peak
### NOA 413161: Aerobic Conditions

| Soil type (indicate if bare or cropped soil was used) | Location (country or USA state) | pH<sup>a)†</sup> | Depth (cm) | DT<sub>50</sub> (d) actual | DT<sub>90</sub>(d) actual | St. (χ²) (norm) | DT<sub>50</sub> (d) Norm<sup>b)</sup> | Formation fraction † | Method of calculation (norm) |
|-----------------------------------------------------|---------------------------------|-----------------|-------------|-------------------------|-------------------------|-----------------|-------------------------------|-------------------|-----------------------------|
| 0-100 cm – Loam – Grass                             | Wipperfuerth (Germany)          | 0-30 cm – 4.3   | 30-50 cm – 4.5 | 50-75 cm – 4.7 | 75-100 cm – 4.7 | 100             | 18.9                         | 43.4<sup>†</sup> | -                           | SFO               |
| 0-75 cm – Sandy Loam – 75-100 cm – Sandy Clay Loam – Grass | Wellesbourne (United Kingdom)  | 0-30 cm – 5.7   | 30-50 cm – 5.6 | 50-75 cm – 6.1 | 75-100 cm – 7.0 | 100             | 15.4                         | 30.7              | 0.263                       | SFO-SFO           |
| 0-30 cm – Silt Loam – 30-100 cm – Silty Clay Loam – Grass | St. Etienne du Gres (Southern France) | 0-30 cm – 7.8   | 30-50 cm – 7.8 | 50-75 cm – 7.8 | 75-100 cm – 7.8 | 100             | 17.3                         | 26.0              | 0.078                       | SFO-SFO           |
| 0-50 cm – Loam – 50-100 cm – Sandy Clay Loam – Grass | Vilobi d’Onyar (Spain)          | 0-30 cm – 6.2   | 30-50 cm – 6.4 | 50-75 cm – 6.4 | 75-100 cm – 6.5 | 100             | 17.2                         | 34.9              | 0.259                       | SFO-SFO           |
| 0-50 cm – Silty Clay Loam – 50-75 cm – Silty Clay – 75-100 cm – Clay Loam – Grass | Albaro (Italy)                  | 0-30 cm – 7.3   | 30-50 cm – 7.4 | 50-75 cm – 7.4 | 75-100 cm – 7.3 | 100             | 16.9                         | 50.8              | 0.055                       | SFO-SFO           |

| Geometric mean (if not pH dependent) | 36.1                              |
| Arithmetic mean                        | 0.164                             |

**pH dependence, Yes or No**  
No

<sup>a)</sup> Measured in CaCl₂  
<sup>b)</sup> Normalised using a Q<sub>10</sub> of 2.58 and Walker equation coefficient of 0.7  
† formation fractions derived considering CGA 321113 as the precursor  
*Top down fit of the decline curve from maximum observed peak
| CGA 357261 | Aerobic conditions (as metabolite dosed study) |
|-------------|-----------------------------------------------|
| Soil type (indicate if bare or cropped soil was used). | Location (country or USA state). | pH<sup>a</sup> | Depth (cm) | DT<sub>50</sub> (d) actual | DT<sub>90</sub>(d) actual | DT<sub>50</sub> (d) Norm<sup>b</sup> | St. (χ<sup>2</sup>) (actual / norm) | Kinetic parameter | Method of calculation (actual / norm) |
| 0-100cm - Loam | Wipperfuerth (Germany) | 0-30 cm–4.3 | 100 | 0.91 | 7.51 | 0.27 | 2.36 / 2.2 | K<sub>1</sub> 2.50 | DFOP / DFOP |
| Grass | | 30-50 cm–4.5 | | | | | | K<sub>2</sub> 0.199 | |
| 0-75 cm - Sandy Loam | Wellesbourne (United Kingdom) | 0-30 cm–5.7 | 100 | 2.62 | 9.1 | 0.61 | 2.25 / 7.9 | K<sub>1</sub> 0.171 | DFOP / SFO |
| 75-100 cm - Sandy Clay Loam | | 30-50 cm–5.6 | | | | | | K<sub>2</sub> 0.025 | |
| Grass | | 50-75 cm–6.1 | | | | | | g -0.035 | |
| 0-100 cm - Silt Loam | Chilly (Northern France) | 0-30 cm–6.7 | 100 | 2.23 | 17.5 | 0.12 | 26.9 / 17.5 | α 0.540 | FOMC / HS |
| Grass | | 30-50 cm–6.7 | | | | | | β 2.206 | |
| 0-30 cm - Silt Loam | St. Etienne du Gres (Southern France) | 0-30 cm–7.8 | 100 | 3.17 | 13.0 | 1.35 | 1.09 / 8.5 | K<sub>1</sub> 0.037 | DFOP / SFO |
| 30-100 cm - Silty Clay Loam | | 30-50 cm–7.8 | | | | | | K<sub>2</sub> 0.009 | |
| Grass | | 50-75 cm–7.8 | | | | | | g 0.0134 | |
| 0-50 cm - Loam | Vilobi d’Onyar (Spain) | 0-30 cm–6.2 | 100 | 1.64 | 6.78 | 0.92 | 3.03 / 8.96 | α 3.861 | FOMC / SFO |
| 50-100 cm - Sandy Clay Loam | | 30-50 cm–6.4 | | | | | | β 8.318 | |
| Grass | | 50-75 cm–6.4 | | | | | | | |
| 0-50 cm - Silty Clay Loam | Albaro (Italy) | 0-30 cm–7.3 | 100 | 0.76 | 4.80 | 0.88 | 4.67 / 24.9 | α 1.47 | FOMC / SFO |
| 50-75 cm - Silty Clay | | 30-50 cm–7.4 | | | | | | β 1.267 | |
| 75-100 cm - Clay Loam | | 50-75 cm–7.4 | | | | | | | |
| Grass | | 75-100cm–7.3 | | | | | | | |
| Geometric mean (if not pH dependent) | | | | | | | | | |
| pH dependence, Yes or No | | | | | | | 0.53 | | No |

<sup>a</sup> Measured in CaCl<sub>2</sub>

<sup>b</sup> Normalised using a Q<sub>10</sub> of 2.58 and Walker equation coefficient of 0.7
| CGA 373466 | Aerobic conditions | Soil type (indicate if bare or cropped soil was used) | Location (country or USA state) | pH[^1] | Depth (cm) | DT<sub>50</sub> (d) actual | DT<sub>90</sub> (d) actual | St. (χ²) (norm) | DT<sub>50</sub> (d) Norm[^b] | Formation fraction † | Method of calculation (norm) |
|-------------|-------------------|--------------------------------------------------|---------------------------------|-------|---------|-------------------|-------------------|----------------|----------------|-----------------|-----------------|
| 0-100 cm - Loam Grass | Wipperfuerth (Germany) | 0-30 cm–4.3 30-50 cm–4.5 50-75 cm–4.7 75-100cm–4.7 | 100 | 12.9 | 6.6[^*] | - | SFO |
| 0-75 cm - Sandy Loam 75-100 cm - Sandy Clay Loam Grass | Wellesbourne (United Kingdom) | 0-30 cm–5.7 30-50 cm–5.6 50-75 cm–6.1 75-100cm–7.0 | 100 | 12.7 | 8.57 | 1.000 | SFO-SFO |
| 0-100 cm - Silt Loam Grass | Chilly (Northern France) | 0-30 cm–6.7 30-50 cm–6.7 50-75 cm–6.7 75-100cm–6.9 | 100 | 27.5 | 29.1 | 0.618 | HS-SFO |
| 0-30 cm - Silt Loam 30-100 cm - Silty Clay Loam Grass | St. Etienne du Gres (Southern France) | 0-30 cm–7.8 30-50 cm–7.8 50-75 cm–7.8 75-100cm–7.8 | 100 | 36.5 | 91.0 | 1.000 | SFO-SFO |
| 0-50 cm - Loam 50-100 cm - Sandy Clay Loam Grass | Vilobi d’Onyar (Spain) | 0-30 cm–6.2 30-50 cm–6.4 50-75 cm–6.4 75-100cm–6.5 | 100 | 9.4 | 14.0 | 1.000 | SFO-SFO |
| 0-50 cm - Silty Clay Loam 50-75 cm - Silty Clay 75-100 cm - Clay Loam Grass | Albaro (Italy) | 0-30 cm–7.3 30-50 cm–7.4 50-75 cm–7.4 75-100cm–7.3 | 100 | 20.4 | 56.1 | 1.000 | SFO-SFO |
| Geometric mean (if not pH dependent) Arithmetic mean | | | | 22.1 | 0.924 |

[^1]Measured in CaCl2

[^2]Normalised using a Q<sub>10</sub> of 2.58 and Walker equation coefficient of 0.7

† formation fractions derived considering CGA 357261 as the precursor

[^*]Top down fit of the decline curve from maximum observed peak

pH dependence, Yes or No

No

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### NOA 413163

#### Aerobic conditions

| Soil type (indicate if bare or cropped soil was used). | Location (country or USA state). | pH<sup>a</sup> | Depth (cm) | DT<sub>50</sub> (d) actual | DT<sub>90</sub>(d) actual | St. (χ<sup>2</sup>) (norm) | DT<sub>90</sub> (d) Norm<sup>b</sup> | Formation fraction † | Method of calculation (norm) |
|-------------------------------------------------------|----------------------------------|---------------|------------|---------------------------|-------------------------|-------------------------|---------------------------|-------------------------|-------------------------|
| 0-100 cm - Loam Grass | Wipperfuerth (Germany) | 0-30 cm – 4.3 30-50 cm – 4.5 50-75 cm – 4.7 75-100cm- 4.7 | 100 | 17.5 | 53.0* | – | SFO |
| 0-75 cm - Sandy Loam 75-100 cm - Sandy Clay Loam Grass | Wellesbourne (United Kingdom) | 0-30 cm – 5.7 30-50 cm – 5.6 50-75 cm – 6.1 75-100cm- 7.0 | 100 | 40.5 | 87.4 | 0.457 | SFO-SFO |
| 0-100 cm - Silt Loam Grass | Chilly (Northern France) | 0-30 cm – 6.7 30-50 cm – 6.7 50-75 cm – 6.7 75-100cm- 6.9 | 100 | 26.7 | 29.9 | 0.4989 | SFO-SFO |
| 0-30 cm - Silt Loam 30-100 cm - Silty Clay Loam Grass | St. Etienne du Gres (Southern France) | 0-30 cm – 7.8 30-50 cm – 7.8 50-75 cm – 7.8 75-100cm- 7.8 | 100 | 20.6 | 36.5 | 0.185 | SFO-SFO |
| 0-50 cm - Loam 50-100 cm - Sandy Clay Loam Grass | Vilobi d’Onyar (Spain) | 0-30 cm – 6.2 30-50 cm – 6.4 50-75 cm – 6.4 75-100cm- 6.5 | 100 | 22.3 | 25.8 | 0.271 | SFO-SFO |
| 0-50 cm - Silty Clay Loam 50-75 cm - Silty Clay 75-100 cm - Clay Loam Grass | Albaro (Italy) | 0-30 cm – 7.3 30-50 cm – 7.4 50-75 cm – 7.4 75-100cm- 7.3 | 100 | 20.3 | 28.7 | 0.115 | SFO-SFO |

| Geometric mean (if not pH dependent) | 39.4 |
| Arithmetic mean | 0.305 |

**pH dependence, Yes or No**

| Yes or No | No |

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<sup>a</sup> Measured in CaCl<sub>2</sub>

<sup>b</sup> Normalised using a Q<sub>10</sub> of 2.58 and Walker equation coefficient of 0.7

† formation fractions derived considering CGA 373466 as the precursor

*Top down fit of the decline curve from maximum observed peak
| NOA 409480 | Aerobic conditions |
|------------|--------------------|
| Soil type (indicate if bare or cropped soil was used). | Location (country or USA state). | pH<sup>a)</sup> | Depth (cm) | DT<sub>50</sub> (d) actual | DT<sub>50</sub>(d) actual | St.<sup>†</sup> (χ²) (norm) | DT<sub>90</sub> (d) Norm<sup>b)</sup> | Formation fraction † | Method of calculation (norm) |
| 0-100 cm - Loam - Grass | Wipperfuerth (Germany) | 0-30 cm – 4.3 30-50 cm – 4.5 50-75 cm – 4.7 75-100 cm - 4.7 | 100 | | | | | | - | SFO |
| 0-75 cm - Sandy Loam 75-100 cm - Sandy Clay Loam - Grass | Wellesbourne (United Kingdom) | 0-30 cm – 5.7 30-50 cm – 5.6 50-75 cm – 6.1 75-100 cm - 7.0 | 100 | | | | | 0.024<sup>a</sup> | Top down DT50 SFO Formation fraction SFO-SFO |
| 0-100 cm - Silt Loam - Grass | Chilly (Northern France) | 0-30 cm – 6.7 30-50 cm – 6.7 50-75 cm – 6.7 75-100 cm - 6.9 | 100 | | | | 34.7 | 0.025 | SFO-SFO |
| 0-30 cm - Silt Loam 30-100 cm - Silty Clay Loam - Grass | St. Etienne du Gres (Southern France) | 0-30 cm – 7.8 30-50 cm – 7.8 50-75 cm – 7.8 75-100 cm - 7.8 | 100 | | | | 111.1<sup>†</sup> | - | SFO |
| 0-50 cm - Loam 50-100 cm - Sandy Clay Loam - Grass | Vilobi d’Onyar (Spain) | 0-30 cm – 6.2 30-50 cm – 6.4 50-75 cm – 6.4 75-100 cm - 6.5 | 100 | | | | 18.5 | 0.028 | SFO-SFO |
| 0-50 cm - Silty Clay Loam 50-75 cm - Silty Clay 75-100 cm - Clay Loam - Grass | Albaro (Italy) | 0-30 cm – 7.3 30-50 cm – 7.4 50-75 cm – 7.4 75-100 cm - 7.3 | 100 | | | | 29.7 | 0.035 | SFO-SFO |

Geometric mean (if not pH dependent) 56.9
Arithmetic mean (n = 5) 6.9
pH dependence, Yes or No No

<sup>a)</sup> Measured in CaCl<sub>2</sub>
<sup>b)</sup> Normalised using a Q<sub>10</sub> of 2.58 and Walker equation coefficient of 0.7
† formation fractions derived considering CGA 373466 as the precursor
*Top down fit of the decline curve from maximum observed peak
$\Delta$ DT50 NOA 409480 fixed to top down value then FF fitted iteratively
Combined laboratory and field kinetic endpoints for modelling (when not from different populations)

Rate of degradation in soil active substance, normalised geometric mean (if not pH dependent) 0.52 (d) geometric mean (n=23) combined lab and field studies

| Transformation product | Rate of degradation in soil transformation products, normalised geometric mean (if not pH dependent) | Kinetic formation fraction (f. f. $k_f / k_{dp}$) of transformation products, arithmetic mean |
|------------------------|-------------------------------------------------|-----------------------------------------------|
| CGA 321113             | 48.1 d, geomean (n=6) from field studies         | 0.707 from field studies formed from parent   |
| CGA 357276             | 51.5 d, geomean (n=9) from combined lab and field studies | 0.0542 from combined lab and field studies formed from CGA 321113 |
| NOA 413161             | 36.1 d, geomean (n=5) from field studies         | 0.164 from field studies formed from CGA 321113 |
| CGA 357261             | 0.26 d, geomean (n=10) from combined lab and field studies | 1.0 formed from parent$^1$ |
| CGA 373466             | 22.1 d, geomena (n=6) from field studies         | 0.924 from field studies formed from CGA 35726 |
| NOA 413163             | 41.7 d, geomean (n=13) from combined lab and field studies | 0.27 from combined lab and field studies formed from CGA 373466 |
| NOA 409480             | 4.25 d, geomean (n=10) from combined lab and field studies | 0.028 from field studies formed from CGA 373466 |
| CGA 381318             | 19.4 d, geomean (n=4) from lab studies           | 0.062 maximum value from trifloxystrobin from lab soil photolysis studies |

$^1$ Formation fraction of 1 accepted for transient nature of metabolite and data generated with metabolite dosed studies

Soil accumulation (Regulation (EU) N° 283/2013, Annex Part A, point 7.1.2.2.2 and Regulation (EU) N° 284/2013, Annex Part A, point 9.1.1.2.2)

Soil accumulation and plateau concentration -

Rate of degradation in soil (anaerobic) laboratory studies active substance (Regulation (EU) N° 283/2013, Annex Part A, point 7.1.2.1.3 and Regulation (EU) N° 284/2013, Annex Part A, point 9.1.1.1)

| Parent | Dark anaerobic conditions |
|--------|---------------------------|
| Soil type | $X$ | pH$^5$ | t. °C / % MWHC | $DT_{50} / DT_{90}$ (d) | $DT_{50}$ (d) 20 °C$^6$ | St. ($\chi^2$) | Method of calculation |
| Data Gap |               |                       |                          |                           |                          |                        |                       |
| Geometric mean (if not pH dependent) | Measured in [medium to be stated, usually calcium chloride solution or water] Normalised using a Q10 of 2.58 |

Rate of degradation in soil (anaerobic) laboratory studies transformation products (Regulation (EU) N° 283/2013, Annex Part A, point 7.1.2.1.4 and Regulation (EU) N° 284/2013, Annex Part A, point 9.1.1.1)

| Met 1 | Dark anaerobic conditions | Metabolite dosed or the precursor from which the f.f. was derived was xxx |

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### Rate of degradation on soil (photolysis) laboratory active substance (Regulation (EU) N° 283/2013, Annex Part A, point 7.1.1.3)

| Soil type     | pH<sup>a</sup> | t. °C / % MWHC | Condition          | DT<sub>50</sub> / DT<sub>90</sub> experimental | DT<sub>50</sub> under natural conditions | St. (χ<sup>2</sup>) | Method of calculation |
|---------------|----------------|----------------|--------------------|-----------------------------------------------|------------------------------------------|-------------------|----------------------|
| Loamy sand    | 7.3 (H<sub>2</sub>O) | 25°C / 75% FC at 1/3 bar | Irradiated         | 2.28 / 41.7 (overall values*)                | -                                        | 5.63              | DFOP                 |
| Loamy sand    | 7.3 (H<sub>2</sub>O) | 25°C / 75% FC at 1/3 bar | Dark control       | 2.33 / 52.5 (overall values *)               | -                                        | 8.92              | DFOP                 |
| Silt loam     | 6.3 (0.01M CaCl<sub>2</sub>) | 20°C / 53% MWHC | Irradiated         | 1.2 / 4.0                                    | 3.4 d Arizona 5.2 d Athens               | 13.2              | SFO                  |
| Silt loam     | 6.3 (0.01M CaCl<sub>2</sub>) | 20°C / 53% MWHC | Dark control       | 1.68 / 5.59                                  | 4.7d Arizona 7.3 d Athens                | 4.25              | SFO                  |

*The values observed in the DFOP analysis do not support the evaluation of the fast phase in isolation because there is only one data point in the assessment prior to the degradation of approximately 50% of the compound. For this reason the UK RMS considers it more reliable to compare the overall DT<sub>50</sub> for the irradiated and dark samples.** The net DT<sub>50</sub> was determined by subtracting the rate constant from the dark control from the rate constant for the irradiated sample, and then converting the result into a DT<sub>50</sub> to obtain the rate of degradation which was due solely to photolysis.

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| Soil type     | pH<sup>a</sup> | t. °C / % MWHC | Condition          | DT<sub>50</sub> / DT<sub>90</sub> experimental | DT<sub>50</sub> under natural conditions | St. (χ<sup>2</sup>) | Method of calculation |
|---------------|----------------|----------------|--------------------|-----------------------------------------------|------------------------------------------|-------------------|----------------------|
| Silt loam     | 6.3 (0.01M CaCl<sub>2</sub>) | 20°C / 53% MWHC | Irradiated         | 4.6 / 15.3                                   | 12.9 d Arizona 20.0 d Athens              | 21.2              | SFO                  |
**The net DT<sub>50</sub> was determined by subtracting the rate constant from the dark control from the rate constant for the irradiated sample, and then converting the result into a DT<sub>50</sub> to obtain the rate of degradation which was due solely to photolysis.

**Soil adsorption active substance (Regulation (EU) N° 283/2013, Annex Part A, point 7.1.3.1.1 and Regulation (EU) N° 284/2013, Annex Part A, point 9.1.2.1)**

| Soil Type               | OC % | Soil pH<sup>a) </sup>| K<sub>d</sub> (mL/g) | K<sub>doc</sub> (mL/g) | K<sub>F</sub> (mL/g) | K<sub>Foc</sub> (mL/g) | 1/n  |
|-------------------------|------|----------------------|----------------------|----------------------|----------------------|----------------------|------|
| Borstal loamy sand      | 1.0  | 5.1                  | 23.3                 | 2327                 | 0.94                 |                      |      |
| Collombey loamy sand    | 0.8  | 7.3                  | 14.7                 | 1837                 | 0.92                 |                      |      |
| Speyer 2.1 sand         | 0.3  | 6.8                  | 11.2                 | 3745                 | 1.00                 |                      |      |
| Gartenacker loam        | 2.0  | 7.1                  | 42.9                 | 2031                 | 0.94                 |                      |      |
| Vetroz silt loam        | 4.7  | 7.2                  | 126.1                | 2683                 | 0.98                 |                      |      |
| Illarsaz humic silt loam| 19.8 | 6.7                  | 325.0                | 1642                 | 0.97                 |                      |      |

Geometric mean (if not pH dependent): 43.5
Arithmetic mean (if not pH dependent): 0.958

pH dependence, **Yes or No**

No

<sup>a) Medium of pH measurement not reported in the RAR</sup>

**Soil adsorption transformation products (Regulation (EU) N° 283/2013, Annex Part A, point 7.1.3.1.2 and Regulation (EU) N° 284/2013, Annex Part A, point 9.1.2.1)**

| Soil Type               | OC % | Soil pH<sup>a) </sup>| K<sub>d</sub> (mL/g) | K<sub>doc</sub> (mL/g) | K<sub>F</sub> (mL/g) | K<sub>Foc</sub> (mL/g) | 1/n  |
|-------------------------|------|----------------------|----------------------|----------------------|----------------------|----------------------|------|
| Collombey loamy sand    | 0.8  | 7.3                  | 0.83                 | 104                  | 1.00                 |                      |      |
| Speyer 2.1 sand         | 0.3  | 6.8                  | 0.58                 | 194                  | 1.11                 |                      |      |
| Gartenacker loam        | 2.0  | 7.1                  | 2.33                 | 117                  | 0.99                 |                      |      |
| Vetroz silt loam        | 4.7  | 7.2                  | 3.96                 | 84                   | 0.95                 |                      |      |
| Illarsaz humic silt loam| 19.8 | 6.7                  | 16.61                | 94                   | 0.97                 |                      |      |
| Borstal loamy sand      | 1.0  | 5.1                  | 1.32                 | 132                  | 0.98                 |                      |      |

Geometric mean (if not pH dependent): 2.14
Arithmetic mean (if not pH dependent): 1.00

pH dependence, **Yes or No**

No

<sup>a) Medium of pH measurement not reported in the RAR</sup>

**Soil Type               | OC % | Soil pH<sup>a) </sup>| K<sub>d</sub> (mL/g) | K<sub>doc</sub> (mL/g) | K<sub>F</sub> (mL/g) | K<sub>Foc</sub> (mL/g) | 1/n  |
|-------------------------|------|----------------------|----------------------|----------------------|----------------------|----------------------|------|
| Madera sandy loam       | 0.6  | 7.0                  | 48.5                 | 8345                 | 0.952                |                      |      |
| Northwood loam          | 3.1  | 6.9                  | 207                  | 6587                 | 0.813                |                      |      |
| Louisberg sandy loam    | 0.8  | 6.6                  | 75.1                 | 9228                 | 0.962                |                      |      |
| Raleigh sand            | 0.8  | 5.6                  | 79.4                 | 9756                 | 0.847                |                      |      |
| Northwood clay loam     | 2.4  | 6.9                  | 169                  | 6934                 | 0.813                |                      |      |

Geometric mean (if not pH dependent): 100
Arithmetic mean (if not pH dependent): 0.877

pH dependence, **Yes or No**

No

<sup>a) Medium of pH measurement not reported in the RAR</sup>
### NOA 413161

| Soil Type                          | OC % | Soil pH⁰ | K<sub>d</sub> (mL/g) | K<sub>doc</sub> (mL/g) | K<sub>F</sub> (mL/g) | K<sub>Foc</sub> (mL/g) | l/n     |
|-----------------------------------|------|----------|----------------------|------------------------|---------------------|------------------------|---------|
| Bortel loamy sand                 | 1.0  | 5.1      | 0.042                | 4.2                    |                     |                        |         |
| Laacher Hof Wurmweise sandy loam  | 1.8  | 5.5      | 0.116                | 6.4                    | 0.912               |                        |         |
| Laacher Hof AXXa sandy loam       | 1.8  | 6.5      | 0.066                | 3.7                    | 0.931               |                        |         |
| Hoefchen am Hohenseh 4a silt loam| 2.4  | 6.8      | 0.049                | 2.0                    | 0.885               |                        |         |
| Dollendorf II clay loam           | 4.6  | 7.1      | 0.095                | 2.1                    | 0.890               |                        |         |
| Geometric mean (if not pH dependent) |      |          | 0.068                | 3.3                    |                     |                        | 0.905   |
| Arithmetic mean (if not pH dependent) |      |          |                      |                        |                     |                        |         |
| pH dependence, Yes or No          | No   |          |                      |                        |                     |                        |         |

a) Measured in calcium chloride solution

### CGA 357261

| Soil Type                        | OC % | Soil pH⁰ | K<sub>d</sub> (mL/g) | K<sub>doc</sub> (mL/g) | K<sub>F</sub> (mL/g) | K<sub>Foc</sub> (mL/g) | l/n     |
|----------------------------------|------|----------|----------------------|------------------------|---------------------|------------------------|---------|
| Madera sandy loam                | 0.6  | 7.0      | 2.78                 | 479                    | 1.034               |                        |         |
| Northwood loam                   | 3.1  | 6.9      | 14.9                 | 476                    | 1.005               |                        |         |
| Louisberg sandy loam             | 0.8  | 6.6      | 3.17                 | 389                    | 0.962               |                        |         |
| Raleigh sand                     | 0.8  | 5.6      | 4.61                 | 567                    | 0.980               |                        |         |
| Northwood clay loam              | 2.4  | 6.9      | 12.8                 | 526                    | 0.990               |                        |         |
| Geometric mean (if not pH dependent) |      |          | 6.00                 | 483.6                  |                     |                        |         |
| Arithmetic mean (if not pH dependent) |      |          |                      |                        |                     |                        | 0.994   |
| pH dependence, Yes or No         | No   |          |                      |                        |                     |                        |         |

a) Medium of pH measurement not reported in the RAR

### CGA 373466

| Soil Type                        | OC % | Soil pH⁰ | K<sub>d</sub> (mL/g) | K<sub>doc</sub> (mL/g) | K<sub>F</sub> (mL/g) | K<sub>Foc</sub> (mL/g) | l/n     |
|----------------------------------|------|----------|----------------------|------------------------|---------------------|------------------------|---------|
| Madera sandy loam                | 0.6  | 7.0      | 0.175                | 30                     | 0.91                |                        |         |
| Northwood loam                   | 3.1  | 6.9      | 3.07                 | 98                     | 0.88                |                        |         |
| Louisberg sandy loam             | 0.8  | 6.6      | 0.516                | 63                     | 0.99                |                        |         |
| Raleigh sand                     | 0.8  | 5.6      | 1.35                 | 166                    | 0.90                |                        |         |
| Northwood clay loam              | 2.4  | 6.9      | 1.98                 | 81                     | 0.79                |                        |         |
| Geometric mean (if not pH dependent) |      |          | 0.942                | 75.7                   |                     |                        |         |
| Arithmetic mean (if not pH dependent) |      |          |                      |                        |                     |                        | 0.894   |
| pH dependence, Yes or No         | No   |          |                      |                        |                     |                        |         |

a) Medium of pH measurement not reported in the RAR

### NOA 413163

| Soil Type                          | OC % | Soil pH⁰ | K<sub>d</sub> (mL/g) | K<sub>doc</sub> (mL/g) | K<sub>F</sub> (mL/g) | K<sub>Foc</sub> (mL/g) | l/n     |
|-----------------------------------|------|----------|----------------------|------------------------|---------------------|------------------------|---------|
| Laacher Hof Wurmweise sandy loam  | 1.8  | 5.6      | 0.172                | 9.6                    | 0.887               |                        |         |
| Laacher Hof AXXa sandy loam       | 1.8  | 6.4      | 0.115                | 6.4                    | 0.920               |                        |         |
| Hoefchen am Hohenseh 4a silt loam| 2.4  | 6.7      | 0.118                | 4.9                    | 0.949               |                        |         |
| Dollendorf II clay loam           | 4.6  | 7.1      | 0.201                | 4.4                    | 0.893               |                        |         |
| Geometric mean (if not pH dependent) |      |          | 0.147                | 6.0                    |                     |                        | 0.912   |
| Arithmetic mean (if not pH dependent) |      |          |                      |                        |                     |                        |         |
| pH dependence, Yes or No          | No   |          |                      |                        |                     |                        |         |

a) Measured in calcium chloride solution

### NOA 409480

| Soil Type                          | OC % | Soil pH⁰ | K<sub>d</sub> (mL/g) | K<sub>doc</sub> (mL/g) | K<sub>F</sub> (mL/g) | K<sub>Foc</sub> (mL/g) | l/n     |
|-----------------------------------|------|----------|----------------------|------------------------|---------------------|------------------------|---------|
| Laacher Hof Wurmweise sandy loam  | 1.8  | 5.5      | 41.7                 | 2317                   | 0.847               |                        |         |
| Soil Type                        | OC % | Soil pH | $K_d$ (mL/g) | $K_{disc}$ (mL/g) | $K_F$ (mL/g) | $K_{Foc}$ (mL/g) | 1/n |
|---------------------------------|------|---------|--------------|------------------|-------------|-----------------|-----|
| Laacher Hof AXXa sandy loam     | 1.5  | 6.2     | 37.6         | 2507             | 0.865       |                 |     |
| Hoefchen am Hohenseh 4a silt loam | 1.6  | 6.5     | 40.5         | 2530             | 0.862       |                 |     |
| Dollendorf II clay loam         | 4.8  | 7.1     | 99.4         | 2070             | 0.879       |                 |     |
| Geometric mean (if not pH dependent) |      |         | 50.1         | 2348             |             |                 |     |
| Arithmetic mean (if not pH dependent) |      |         |              |                  |             | 0.863           |     |
| pH dependence, Yes or No        | No   |         |              |                  |             |                 |     |

*Measured in calcium chloride solution

CGA 381318

| Soil Type                  | OC % | Soil pH | $K_d$ (mL/g) | $K_{disc}$ (mL/g) | $K_F$ (mL/g) | $K_{Foc}$ (mL/g) | 1/n |
|----------------------------|------|---------|--------------|------------------|-------------|-----------------|-----|
| Laacher Hof Wurmweise sandy loam | 1.8  | 5.1     | 1.41         | 78.2             | 0.866       |                 |     |
| Laacher Hof AXXa sandy loam  | 1.5  | 5.9     | 1.13         | 75.5             | 0.892       |                 |     |
| Hoefchen am Hohenseh 4a silt loam | 1.6  | 6.2     | 1.21         | 75.9             | 0.895       |                 |     |
| Dollendorf II clay loam      | 4.8  | 7.1     | 3.68         | 76.6             | 0.896       |                 |     |
| Geometric mean (if not pH dependent) |      |         | 1.63         | 76.5             |             |                 |     |
| Arithmetic mean (if not pH dependent) |      |         |              |                  |             | 0.887           |     |
| pH dependence, Yes or No     | No   |         |              |                  |             |                 |     |

*Measured in calcium chloride solution
Mobility in soil column leaching active substance (Regulation (EU) N° 283/2013, Annex Part A, point 7.1.4.1.1 and Regulation (EU) N° 284/2013, Annex Part A, point 9.1.2.1)

| Column leaching | SETAC/EPA Guideline. 251ml (percolation period 1-144 hours depending on soil type), 5 soil columns. Leachate 0.2-1.2% radioactivity in leachate 86-102% radioactivity in top 6cm soil. |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | Dutch Guideline. Aged for 2d, 200ml over 2-6d (2 soil columns). [14C-GP]-label Leachate 0.1-0.4% radioactivity in leachate 21-44% radioactivity in top 6cm soil. [14C-TP]-label Leachate 3.3-4.1% radioactivity in leachate 20-35% radioactivity in top 6cm soil. |
|                 | EPA Guideline. Aged for 1-45d, 490ml over <1-84d (7 soil columns). [14C-GP]-label Results after 1 day aging Leachate: <0.1-30.1% radioactivity in leachate. Mainly CGA321113, trifloxystrobin not detected. 10-57% radioactivity in top 6cm of soil |

Mobility in soil column leaching transformation products (Regulation (EU) N° 283/2013, Annex Part A, point 7.1.4.1.2 and Regulation (EU) N° 284/2013, Annex Part A, point 9.1.2.1)

| Column leaching | No data submitted or required as leaching data have not been used in the environmental exposure assessment |

Lysimeter / field leaching studies (Regulation (EU) N° 283/2013, Annex Part A, points 7.1.4.2 / 7.1.4.3 and Regulation (EU) N° 284/2013, Annex Part A, points 9.1.2.2 / 9.1.2.3)

Lysimeter/ field leaching studies

| Location | Duration | Soil | Crop | Applications | Rainfall | Leachate Volume | Leachate Concentrations |
|----------|----------|------|------|-------------|----------|-----------------|------------------------|
| US       | 3 months | 90cm soil columns | 90cm soil columns | 1 application of 3.4 kg/ha to 90cm deep soil columns, rainfall 403mm over period. | 4806ml | <0.04% radioactivity detected in leachate which was not identified. |
| Switzerland | 3 years | 120cm soil monoliths, cropped with wheat | 120cm soil monoliths, cropped with wheat | Up to 4 applications over 2 years, 0.5 kg a.s. / ha / year, annual rainfall+irrigation 935-1032mm over period. | 404-635ml (43-66% of precipitation, very high). | Trifloxystrobin: Not detected, CGA373466: up to 0.24 µg/l, CGA321113: up to 1.22 µg/l, NOA413163: up to 2.76 µg/l, NOA413161: up to 6.69 µg/l |

All resolved radioactivity representing annual average leachate concentrations > 0.1 µg/l was identified.
Hydrolytic degradation (Regulation (EU) No 283/2013, Annex Part A, point 7.2.1.1)

| pH | [14C-GP]-label | 25°C - DT50 | (1st order, \( r^2 = 0.54 \)) | [14C-TP]-label | 25°C - DT50 | >1000d (1st order, \( r^2 = 0.02 \)) |
|----|----------------|-------------|--------------------------------|----------------|-------------|----------------|
| 5  |                | 480d        |                                |                |             |                |
| 7  |                | 39-41d      | (1st order, \( r^2 = 0.96 \)) |                | 40d         | (1st order, \( r^2 = 0.99 \)) |
| 9  |                | 1.2d        | (1st order, \( r^2 = 0.98 \)) |                | 2.3d        | (1st order, \( r^2 = 0.9 \)) |

CGA321113 32-46%AR at study end

CGA321113 60%AR at study end

CGA321113 stable to hydrolysis at 25°C
Aqueous photochemical degradation (Regulation (EU) N° 283/2013, Annex Part A, points 7.2.1.2 / 7.2.1.3)

Photolytic degradation of active substance and metabolites above 10 %

| [14C-GP]trifloxystrobin | Xenon arc lamp (>290nm, 22.2 W/m²) |
|--------------------------|-----------------------------------|
| pH 7.2 DT₅₀ 2.7d, CGA 357262 10.2%, CGA357261 40%, CGA 373466 16.9% |

Xenon arc lamp (>290nm, 23-40.65 W/m²)

| [14C-TP]trifloxystrobin | pH5 DT₅₀ 2.6d, CGA107170 52%, CGA 357261 41.6% |

| [14C-TP]trifloxystrobin | pH7 DT₅₀ 5.8-9.5d, CGA 357261 35%, CGA373466 44.1%, CGA321113 23%, CGA107170 21.4% |

Photolysis of CGA321113

Xenon-arc lamp (>290nm, 35-44.6 W/m²)

DT₅₀ 1.7d

Estimated DT₅₀ at 50°N by quantum yield

Trifloxystrobin + isomers 42.2d

Trifloxystrobin alone 3.1d

CGA321113 + isomers 42.2d

CGA321113 alone 3.4d

Indirect photolysis:

Experimental DT₅₀ lab of trifloxystrobin: 0.11 d (hockey stick kinetics of irradiated samples, in natural river water with mean average pH 7.9)

Metabolites in irradiated samples:

CGA357261(isomer of trifloxystrobin) (max 51.5% AR at 7 h)

CGA 321113 (max 11.1% AR at 4 d)

CGA373466 (isomer of CGA321113) (max 21.1% AR at 4 d)

Metabolites in non-irradiated samples:

CGA 321113 (max 86.0% AR at 8 d)

Quantum yield of direct phototransformation in water at Σ > 290 nm

0.0639 - trifloxystrobin & isomers

0.2272 - trifloxystrobin alone

‘Ready biodegradability’ (Regulation (EU) N° 283/2013, Annex Part A, point 7.2.2.1)

Readily biodegradable (yes/no)

Not readily biodegradable
### Aerobic mineralisation in surface water (Regulation (EU) N° 283/2013, Annex Part A, point 7.2.2.2 and Regulation (EU) N° 284/2013, Annex Part A, point 9.2.1)

| Parent | pH, water phase | pH, sed <sup>a</sup> | t, °C<sup>b</sup> | DT<sub>50</sub>/DT<sub>90</sub>, whole sys. (suspended sediment test) | St. (χ<sup>2</sup>) | DT<sub>50</sub>/DT<sub>90</sub>, Water (pelagic test) | St. (χ<sup>2</sup>) | Method of calculation |
|--------|----------------|----------------------|-----------------|-------------------------------------------------|------------------|--------------------------------------------|------------------|---------------------|
| Froeschweiher Pond (6.1 µg/l) | 8.2, - | 22.9 | At study temp | Normalised to x °C<sup>c</sup> | At study temp | Normalised to 12 °C<sup>c</sup> | 1.41/4.68 | 3.90/12.94 | 3.6/3.9 | SFO |
| Froeschweiher Pond (53.7 µg/l) | 8.2, - | 22.9 | At study temp | Normalised to x °C<sup>c</sup> | At study temp | Normalised to 12 °C<sup>c</sup> | 1.36/4.52 | 3.76/12.49 | 3.6/3.9 | SFO |
| Mean | 8.2 | 22.9 | At study temp | Normalised to x °C<sup>c</sup> | At study temp | Normalised to 12 °C<sup>c</sup> | 1.4/4.6 | 3.87/12.71 |          |        |

<sup>a</sup> Measured in [medium to be stated, usually calcium chloride solution or water]

<sup>b</sup> Temperature of incubation=temperature that the environmental media was collected or std temperature of 20°C

<sup>c</sup> Normalised using a Q<sub>10</sub> of 2.58 in line with ECHA (2014, 2017) R11 PBT Guidance.
### Mineralisation and non extractable residues (for parent dosed experiments)

| System identifier (indicate fresh, estuarine or marine) | pH water phase | pH sed | Mineralisation | Non-extractable residues (suspended sediment test) | Non-extractable residues, max \( x \% \) after \( n \) d (end of the study) (suspended sediment test) |
|---------------------------------------------------------|----------------|--------|----------------|---------------------------------|-------------------------------------------------|
| Froeschweiher Pond (6.1 µg/l)                           | 8.2            | 0.1% at 62 days | 0.6% at 62 days |
| Froeschweiher Pond (53.7 µg/l)                          | 8.2            | <0.1% at 62 days | 0.9% at 62 days |
| **Mean**                                                |                |                    |                |

### Water / sediment study (Regulation (EU) N° 283/2013, Annex Part A, point 7.2.2.3 and Regulation (EU) N° 284/2013, Annex Part A, point 9.2.2) modelling

| Parent       | Distribution (max. in sediment 36.6% AR after 1 day) | Method of calculation |
|--------------|------------------------------------------------------|-----------------------|
| Water / sediment system | pH water phase | pH sed | t. °C | DT\(_{50}^{a}\)/DT\(_{90}^{a}\) whole sys. | St. (\(\chi^2\)) | DT\(_{50}^{a}\)/DT\(_{90}^{a}\) water | St. (\(\chi^2\)) | DT\(_{50}^{a}\)/DT\(_{90}^{a}\) sed | St. (\(\chi^2\)) | Method of calculation |
| Swiss river\(^c\) | 7.5 | 20 | 2.18 | 4.3 | 0.77 | 9.7 | 3.57 | 9.2 | SFO |
| Swiss pond\(^c\) | 7.3 | 20 | 1.25 | 1.9 | 0.90 | 4.8 | 1.48 | 6.0 | SFO |
| Swiss river\(^d\) | 7.5 | 20 | 2.63 | 6.1 | 0.57 | 8.9 | 4.08 | 12.3 | SFO |
| Swiss pond\(^d\) | 7.3 | 20 | 1.14 | 1.0 | 0.86 | 2.8 | 1.67 | 6.3 | SFO |
| **Geometric mean at 20°C\(^b\)** | 1.69 | 0.76 | 2.45 |

\(^a\) Medium of pH measurement not reported in the RAR  
\(^b\) Normalised using a Q10 of 2.58  
\(^c\) (U\(^{14}\)-C-phenyl-glyoxylat-labeled CGA 279202  
\(^d\) [trifluoromethyl-phenyl-(U)-\(^{14}\)C] labelled CGA 279202

### Water / sediment study (Regulation (EU) N° 283/2013, Annex Part A, point 7.2.2.3 and Regulation (EU) N° 284/2013, Annex Part A, point 9.2.2) trigger

| Parent       | Distribution | Method of calculation |
|--------------|--------------|-----------------------|
| Water / sediment system | pH water phase | pH sed | t. °C | DT\(_{50}^{a}\)/DT\(_{90}^{a}\) whole sys. | St. (\(\chi^2\)) | DT\(_{50}^{a}\)/DT\(_{90}^{a}\) water | St. (\(\chi^2\)) | DT\(_{50}^{a}\)/DT\(_{90}^{a}\) sed | St. (\(\chi^2\)) | Method of calculation |
| Swiss river\(^c\) | 7.5 | 20 | 2.18/7.25 | 4.2 | 0.66/3.23 | 0.7 | 3.57/11.85 | 9.2 | SFO/DFOP/ SFO |
| Swiss pond\(^c\) | 7.3 | 20 | 1.25/4.16 | 1.9 | 0.86/3.33 | 1.4 | 1.45/4.82 | 2.2 | SFO/FOMC /HS |
| Swiss river\(^d\) | 7.5 | 20 | 2.63/8.73 | 6.1 | 0.56/3.18 | 1.3 | 4.08/13.55 | 12.3 | SFO/HS/SFO |
| Swiss pond\(^d\) | 7.3 | 20 | 1.14/3.79 | 1.0 | 0.83/3.12 | 0.7 | 1.37/6.59 | 2.4 | SFO/FOMC /FOMC |
| **Geometric mean at 20°C\(^b\)** | 1.69/5.62 | 0.72/3.21 | 2.32/8.45 |

\(^a\) Medium of pH measurement not reported in the RAR  
\(^b\) Normalised using a Q10 of 2.58  
\(^c\) (U\(^{14}\)-C-phenyl-glyoxylat-labeled CGA 279202  
\(^d\) [trifluoromethyl-phenyl-(U)-\(^{14}\)C] labelled CGA 279202
d) [trifluoromethyl-phenyl-(U)-14C] labelled CGA 279202

Water / sediment study (Regulation (EU) N° 283/2013, Annex Part A, point 7.2.2.3 and Regulation (EU) N° 284/2013, Annex Part A, point 9.2.2) modelling

| CGA 321113 | Distribution (max. in water 76.9% AR after 7 days, max in sediment 51.1% AR after 21 day) |
|------------|----------------------------------------------------------------------------------------|
| Water / sediment system | pH water phase | pH sed $^a$ | t. °C | $DT_{50}/DT_{90}$ whole sys. | St. ($\chi^2$) | $DT_{50}/DT_{90}$ water | St. ($\chi^2$) | $DT_{50}/DT_{90}$ sed | St. ($\chi^2$) | Method of calculation |
| Swiss river $^c$ | 7.5 | 20 | 423.1 | 2.2 | 285.1 | 6.1 | 570.9 | 2.1 | SFO |
| Swiss pond $^c$ | 7.3 | 20 | 341.1 | 1.5 | 154.6 | 7.1 | 1000$^d$ | n/a | SFO |
| Swiss river $^d$ | 7.5 | 20 | 362.9 | 2.1 | 319.9 | 5.2 | 441.8 | 3.4 | SFO |
| Swiss pond $^d$ | 7.3 | 20 | 432.7 | 2.6 | 137.1 | 11.3 | 1000$^f$ | n/a | SFO |

Geometric mean at 20°C$^b$ 388.0 209.7 708.7

a) Medium of pH measurement not reported in the RAR
b) Normalised using a Q10 of 2.58
c) (U)14-C-phenyl-glyoxylat-labeled CGA 279202
d) [trifluoromethyl-phenyl-(U)-14C] labelled CGA 279202
e) No clear dissipation occurred, FOCUS default used

Water / sediment study (Regulation (EU) N° 283/2013, Annex Part A, point 7.2.2.3 and Regulation (EU) N° 284/2013, Annex Part A, point 9.2.2) trigger

| CGA 321113 | Distribution |
|------------|--------------|
| Water / sediment system | pH water phase | pH sed $^a$ | t. °C | $DT_{50}/DT_{90}$ whole sys. | St. ($\chi^2$) | $DT_{50}/DT_{90}$ water | St. ($\chi^2$) | $DT_{50}/DT_{90}$ sed | St. ($\chi^2$) | Method of calculation |
| Swiss river $^c$ | 7.5 | 20 | 423.1/ >1000 | 2.2 | 281.0/ >1000 | 1.4 | 570.9/ >1000 | 2.1 | SFO/DFOP/ SFO |
| Swiss pond $^c$ | 7.3 | 20 | 341.1/ >1000 | 1.5 | 126.7/ 633 | 2.8 | >1000/ >1000$^e$ | n/a | SFO/DFOP/ SFO |
| Swiss river $^d$ | 7.5 | 20 | 362.9/ >1000 | 2.1 | 319.9/ >1000 | 5.2 | 441.8/ >1000 | 3.4 | SFO/SFO/SFO |
| Swiss pond $^d$ | 7.3 | 20 | 432.7/ >1000 | 2.6 | 79.6/ >1000 | 5.2 | >1000/ >1000$^e$ | n/a | SFO/FOMC /SFO |

Geometric mean at 20°C$^b$ 388.0/ >1000 173.5/ >1000 708.7/ >1000

a) Medium of pH measurement not reported in the RAR
b) Normalised using a Q10 of 2.58
c) (U)14-C-phenyl-glyoxylat-labeled CGA 279202
d) [trifluoromethyl-phenyl-(U)-14C] labelled CGA 279202
e) No clear dissipation occurred, FOCUS default used

Mineralisation and non extractable residues (for parent dosed experiments)

| System identifier | Mineralisation | Non-extractable residues Max % and time | Non-extractable residues, max % (end of the study) |
|-------------------|----------------|----------------------------------------|-----------------------------------------------|

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### Fate and behaviour in air (Regulation (EU) N° 283/2013, Annex Part A, point 7.3.1)

| Environment | Activity | Description |
|-------------|----------|-------------|
| Swiss river | Direct photolysis in air | Not studied - no data requested |
| Swiss pond  | Direct photolysis in air | Not studied - no data requested |
| Swiss river | Photochemical oxidative degradation in air | Trifloxystrobin: DT$_{50}$ 1.5-2 days (Atkinson method) CGA107170: DT$_{50}$ 23.3d (Atkinson method) |
| Swiss pond  | Photochemical oxidative degradation in air | Trifloxystrobin: DT$_{50}$ 1.5-2 days (Atkinson method) CGA107170: DT$_{50}$ 23.3d (Atkinson method) |
| Swiss river | Volatilisation | from plant surfaces (BBA guideline): 10-15% of applied radioactivity lost after 24hrs |
| Swiss pond  | Volatilisation | from soil surfaces (BBA guideline): not submitted |

### Residues requiring further assessment (Regulation (EU) N° 283/2013, Annex Part A, point 7.4.1)

Environmental occurring residues requiring further assessment by other disciplines (toxicology and ecotoxicology) and or requiring consideration for groundwater exposure:

- **Soil:** trifloxystrobin, CGA 357261, CGA 321113, CGA 373466, CGA 381318, NOA 413161, NOA 413163, CGA 357276, NOA 409480
- **Surface water:** same as soil plus CGA 357262, CGA 107170
- **Sediment:** trifloxystrobin, CGA 321113
- **Ground water:** same as soil
- **Air:** trifloxystrobin, CGA 107170

### Definition of the residue for monitoring (Regulation (EU) N° 283/2013, Annex Part A, point 7.4.2)

See section 5, Ecotoxicology

### Monitoring data, if available (Regulation (EU) N° 283/2013, Annex Part A, point 7.5)

| Environment | Activity | Description |
|-------------|----------|-------------|
| Soil (indicate location and type of study) | - | - |
| Surface water (indicate location and type of study) | - | - |
| Ground water (indicate location and type of study) | - | - |
| Air (indicate location and type of study) | - | - |
**PEC soil (Regulation (EU) N° 284/2013, Annex Part A, points 9.1.3 / 9.3.1)**

| Parent & metabolites | Method of calculation | Application data |
|----------------------|-----------------------|-------------------|
|                      | DT$_{50}$ (d): N/A    | Crop: N/A         |
|                      | Kinetics: N/A         | Depth of soil layer: 5cm or 20cm |
|                      | Field or Lab: N/A     | Soil bulk density: 1.5g/cm$^3$ |
|                      |                       | % plant interception: 0% |
|                      |                       | Number of applications: 1 |
|                      |                       | Interval (d): N/A     |
|                      |                       | Application rate(s): 375 g a.s./ha |
|                      |                       | PEC$_{s}$ (mg/kg)    |

|                      | Single application Actual | Single application Time weighted average | Multiple application Actual | Multiple application Time weighted average |
|----------------------|----------------------------|------------------------------------------|-----------------------------|------------------------------------------|
| Initial              | 0.500                      | 0.500                                    |                             |                                          |
| Short term           |                            |                                          |                             |                                          |
| 24h                  | 0.435                      | 0.467                                    |                             |                                          |
| 2d                   | 0.379                      | 0.437                                    |                             |                                          |
| 4d                   | 0.287                      | 0.384                                    |                             |                                          |
| Long term            |                            |                                          |                             |                                          |
| 7d                   | 0.189                      | 0.320                                    |                             |                                          |
| 14d                  | 0.072                      | 0.221                                    |                             |                                          |
| 21d                  | 0.027                      | 0.162                                    |                             |                                          |
| 28d                  | 0.010                      | 0.126                                    |                             |                                          |
| Plateau concentration| N/A                       |                                          |                             |                                          |

d) * A simple first tier soil calculation suitable for risk assessment of both the parent and associated metabolites has been provided.

e) This first tier PEC$_{soil}$ value was based on the following conservative assumptions:-

- Single application of the maximum intended total annual dose of 375 g a.s./ha (based on a worst case GAP of 3 x 125 g a.s./ha to vines)
- No crop interception
- No degradation
- Even incorporation over 5cm soil layer with dry bulk density of 1.5 g cm$^{-3}$

This resulted in a first tier PEC$_{soil}$ value of 0.50 mg a.s./kg.

Metabolites proposed for consideration in the soil exposure assessment:-

- CGA 321113
- NOA 413161
- CGA 357276
- CGA 357261 (additional 21 day TWA calculated based on proportion for ecotoxicology)
- CGA 373466
- NOA 413163
NOA 409480  
CGA 381318  

This simplified approach is appropriate for first tier risk assessments due to the relatively low toxicity to soil non-target organisms by both Trifloxystrobin-methyl and the majority of metabolites.

| CGA 357276 * Method of calculation |
|-------------------------------------|
| Molecular weight relative to the parent |
| DT$_{50}$ (d): N/A |
| Kinetics: N/A |
| Field or Lab: N/A |

Application data  
N/A

| PEC$_{(s)}$ (mg/kg) | Single application Actual | Single application Time weighted average | Multiple application Actual | Multiple application Time weighted average |
|---------------------|---------------------------|----------------------------------------|----------------------------|----------------------------------------|
| Initial             | 0.022                     |                                        |                            |                                        |
| Plateau concentration | N/A                      |                                        |                            |                                        |

*Based on the first tier consideration (PECsoil 0.50 mg/kg) by UK RMS ecotox specialists, CGA 357276 required further refinement.

The first tier PECsoil value for CGA 357276 has been refined based on the metabolite’s relative molecular mass compared to the parent substance ($318.3/408.4 = 0.779$), and a peak formation in soil of 5.6%.

The first tier PECsoil value of 0.5 mg/kg is therefore reduced to 0.022 mg/kg ($0.5 \times 0.779 \times 0.056$), for environmental exposure CGA 357276.

NOA409480 *  
Method of calculation  
Molecular weight relative to the parent  
DT$_{50}$ (d): N/A  
Kinetics: N/A  
Field or Lab: N/A

Application data  
N/A

| PEC$_{(s)}$ (mg/kg) | Single application Actual | Single application Time weighted average | Multiple application Actual | Multiple application Time weighted average |
|---------------------|---------------------------|----------------------------------------|----------------------------|----------------------------------------|
| Initial             | 0.036                     |                                        |                            |                                        |
| Plateau concentration | N/A                      |                                        |                            |                                        |

*Based on the first tier consideration (PECsoil 0.50 mg/kg) by UK RMS ecotox specialists, NOA 409480 required further refinement.

The first tier PECsoil value for NOA 409480 has been refined based on the metabolite’s relative molecular mass compared to the parent substance ($318.3/408.4 = 0.779$), and a peak formation in soil of 9.3%.
The first tier PECsoil value of 0.5 mg/kg is therefore reduced to 0.036 mg/kg (0.5 x 0.779 x 0.093), for environmental exposure NOA 409480.

Provided these PECsoil values result in acceptable ecotoxicological risk assessments, no further refinement is required.

**CGA 357261** *

**Method of calculation**

| Molecular weight relative to the parent |
|----------------------------------------|
| DT$_{50}$ (d): N/A                     |
| Kinetics: N/A                          |
| Field or Lab: N/A                      |

**Application data**

| **PEC$_{(s)}$** (mg/kg) | Single application | Single application | Multiple application | Multiple application |
|-------------------------|--------------------|--------------------|----------------------|----------------------|
|                         | Actual             | Time weighted average | Actual             | Time weighted average |
| Initial                 | 0.078              | 0.078              |                      |                     |
| Short term 24h          | 0.067              | 0.072              |                      |                     |
| 2d                     | 0.059              | 0.068              |                      |                     |
| 4d                     | 0.045              | 0.059              |                      |                     |
| Long term 7d            | 0.029              | 0.050              |                      |                     |
| 14d                    | 0.011              | 0.034              |                      |                     |
| 21d                    | 0.004              | 0.025              |                      |                     |
| 28d                    | 0.002              | 0.020              |                      |                     |
| Plateau concentration   | N/A                |                    |                      |                     |

*Based on the first tier consideration (PEC$_{(s)}$ 0.50 mg/kg) by ecotox specialists, CGA 357261 required further refinement (in the form of a 21 day TWA value).

The first tier PEC$_{(s)}$ value for CGA 357261 has been refined based on the metabolite’s relative molecular mass compared to the parent substance (408.4/408.4 = 1.000), and a peak formation in soil of 15.5%.

The first tier PEC$_{(s)}$ value of 0.5 mg/kg for trifloxystrobin is therefore reduced to 0.078 mg/kg (0.5 x 1.000 x 0.155), for environmental soil exposure of CGA 357261.
PEC ground water (Regulation (EU) N° 284/2013, Annex Part A, point 9.2.4.1)

Method of calculation and type of study - modelling

| Substance   | Crop uptake factor | Water solubility (mg/L) | Vapour pressure | Geometric mean DT₅₀ | KₐOC | Formation Fraction |
|--------------|--------------------|--------------------------|-----------------|---------------------|------|-------------------|
| Trifloxystrobin | 0                  | 0.61 at pH 4-10 and 25°C | 0 Pa at 20°C (default) | 0.6d | parent, geometric mean 2287 mL/g, arithmetic mean \(1/n=0.96\). |
| Metabolites: |                    |                          |                 |                     |      |                   |
| CGA 321113- from parent | 0                  | 21000 at pH 6.6 and 25°C | 0 Pa at 20°C (default) | 48.1d | geometric mean 116.19 mL/g, arithmetic mean \(1/n=1.00\) |
| NOA 413161- from CGA 321113 | 0                  | 290000 at pH 7.1 and 25°C | 0 Pa at 20°C (default) | 36.1d | geometric mean 3.3 mL/g, arithmetic mean \(1/n=0.905\) |
| CGA 357276- from CGA 321113 | 0                  | 0.6 at pH 6.2 and 20°C | 0 Pa at 20°C (default) | 51.5d | geometric mean 8074 mL/g, arithmetic mean \(1/n=0.877\) |
| CGA 357261- from parent | 0                  | 4 at 25°C | | | | |

For FOCUS gw modelling, values used –
Modelling using FOCUS model(s), with appropriate FOCUSgw scenarios, according to FOCUS guidance.
Model(s) used: PEARL v4.4.4 / PELMO v5.5.3

Trifloxystrobin:
Crop uptake factor: 0
Water solubility (mg/L): 0.61 at pH 4-10 and 25°C
Vapour pressure: 0 Pa at 20°C (default)
Geometric mean parent DT₅₀:0.6d
KₐOC: parent, geometric mean 2287 mL/g, arithmetic mean \(1/n=0.96\).
Vapour pressure: 0 Pa at 20°C (default)
Geometric mean DT₅₀: 0.25 d
Kₐₒₐ: geometric mean 483.6 mL/g, arithmetic mean 1/n= 0.994
Formation Fraction: 1 (worst case)

CGA 373466- from CGA 357261
Crop uptake factor: 0
Water solubility (mg/L): 250000 at pH 6.9 and 25°C
Vapour pressure: 0 Pa at 20°C (default)
Geometric mean DT₅₀: 22.1 d
Kₐₒₐ: geometric mean 75.7 mL/g, arithmetic mean 1/n= 0.894
Formation Fraction: 0.936

NOA 413163- from CGA 373466
Crop uptake factor: 0
Water solubility (mg/L): 63000 at pH 4.9 and 25°C
Vapour pressure: 0 Pa at 20°C (default)
Geometric mean DT₅₀: 41.5 d
Kₐₒₐ: geometric mean 6 mL/g, arithmetic mean 1/n= 0.912
Formation Fraction: 0.269

NOA 409480- from CGA 373466
Crop uptake factor: 0
Water solubility (mg/L): 2.6 at pH 6 and 20°C
Vapour pressure: 0 Pa at 20°C (default)
Geometric mean DT₅₀: 42.5 d
Kₐₒₐ: geometric mean 2349 mL/g, arithmetic mean 1/n= 0.863
Formation Fraction: 0.028

CGA 381318- from parent
Crop uptake factor: 0
Water solubility (mg/L): 21000 at pH 6.6 and 25°C
Vapour pressure: 0 Pa at 20°C (default)
Geometric mean DT₅₀: 19.4 d
Kₐₒₐ: geometric mean 76.5 mL/g, arithmetic mean 1/n= 0.887
Formation Fraction: 0.062

PEC(gw) - FOCUS modelling results (80th percentile annual average concentration at 1m)

| Crop code | Scenario | 1st Appl. Date | Parent (µg/L) | Metabolite (µg/L) |
|-----------|----------|----------------|---------------|------------------|
| NOA 413161 | CGA 321113 | NOA 413161 | CGA 357276 |
### Trifloxystrobin Metabolite Levels in Different Locations

| Location     | Application Date | Parent (µg/L) | Metabolite (µg/L) | CGA 357 261 | CGA 373466 | NOA 413163 | NOA 409480 | CGA 381318 |
|--------------|------------------|---------------|-------------------|-------------|------------|------------|------------|------------|
| Châteaudun   | 07-Apr           | 0.000         | 0.610             | 1.503       | 0.000      |            |            |            |
| Hamburg      | 22-Apr           | 0.000         | 0.953             | 3.135       | 0.002      |            |            |            |
| Jokioinen    | 15-May           | 0.000         | 0.434             | 2.968       | 0.000      |            |            |            |
| Kremsmünster | 21-Apr           | 0.000         | 0.528             | 1.083       | 0.000      |            |            |            |
| Okehampton   | 31-Mar           | 0.000         | 0.527             | 0.965       | 0.000      |            |            |            |
| Piacenza     | 8-Apr            | 0.000         | 0.419             | 0.846       | 0.001      |            |            |            |
| Porto        | 23-Mar           | 0.000         | 0.229             | 0.546       | 0.000      |            |            |            |
| Sevilla      | 22-Mar           | 0.000         | 0.566             | 1.409       | 0.000      |            |            |            |
| Thiva        | 22-Mar           | 0.000         | 0.485             | 1.182       | 0.000      |            |            |            |

### Trifloxystrobin Metabolite Levels in Different Locations (continued)

| Location     | Application Date | Parent (µg/L) | Metabolite (µg/L) | CGA 357 261 | CGA 373466 | NOA 413163 | NOA 409480 | CGA 381318 |
|--------------|------------------|---------------|-------------------|-------------|------------|------------|------------|------------|
| Châteaudun   | 07-Apr           | 0.000         | 0.675             | 1.280       | 0.000      |            |            |            |
| Hamburg      | 22-Apr           | 0.000         | 0.618             | 1.722       | 0.002      |            |            |            |
| Jokioinen    | 15-May           | 0.000         | 0.378             | 2.352       | 0.000      |            |            |            |
| Kremsmünster | 21-Apr           | 0.000         | 0.603             | 1.207       | 0.000      |            |            |            |
| Okehampton   | 31-Mar           | 0.000         | 0.726             | 1.036       | 0.000      |            |            |            |
| Piacenza     | 08-Apr           | 0.000         | 0.598             | 0.808       | 0.002      |            |            |            |
| Porto        | 23-Mar           | 0.000         | 0.348             | 0.556       | 0.000      |            |            |            |
| Sevilla      | 22-Mar           | 0.000         | 0.385             | 1.120       | 0.000      |            |            |            |
| Thiva        | 22-Mar           | 0.000         | 0.378             | 0.910       | 0.000      |            |            |            |

1 Route of degradation Trifloxystrobin → GA 318381 not simulated using PEARL for Apples Early 3 x 75 g/ha.
### Table 1: Metabolite Concentrations in Pear Juice Following Pesticide Application

| Scenario            | Metabolite (µg/L) | Parent (µg/L) | Parent (µg/L) | Parent (µg/L) |
|---------------------|-------------------|---------------|---------------|---------------|
|                     | CGA 357 261       | CGA 373466    | NOA 413163    | NOA 409480    | CGA 381318    |
| Châteaudun          | 0.000             | 0.007         | 2.910         | 0.000         | 0.000         |
| Hamburg             | 0.000             | 0.010         | 3.465         | 0.000         | 0.000         |
| Jokioinen           | 0.000             | 0.001         | 4.633         | 0.000         | 0.000         |
| Kremsmünster        | 0.000             | 0.007         | 2.554         | 0.000         | 0.000         |
| Okehampton          | 0.000             | 0.014         | 2.178         | 0.000         | 0.000         |
| Piacenza            | 0.000             | 0.021         | 1.913         | 0.000         | 0.000         |
| Porto               | 0.000             | 0.005         | 1.162         | 0.000         | 0.000         |
| Sevilla             | 0.000             | 0.001         | 2.385         | 0.000         | 0.000         |
| Thiva               | 0.000             | 0.001         | 1.960         | 0.000         | 0.000         |

### Table 2: Metabolite Concentrations in Pear Juice Following Pesticide Application

| Scenario            | 1st Appl. Date | Parent (µg/L) | Metabolite (µg/L) | Parent (µg/L) | Parent (µg/L) |
|---------------------|---------------|---------------|-------------------|---------------|---------------|
|                     |               |               | CGA 321113       | NOA 413161    | CGA 357276    |
| Châteaudun          | 29-Apr        | 0.000         | 0.880            | 2.195         | 0.000         |
| Hamburg             | 17-May        | 0.000         | 1.568            | 4.974         | 0.004         |
| Jokioinen           | 03-Jun        | 0.000         | 0.698            | 4.671         | 0.000         |
| Kremsmünster        | 16-May        | 0.000         | 0.844            | 1.627         | 0.000         |
| Okehampton          | 21-Apr        | 0.000         | 0.792            | 1.468         | 0.000         |
| Piacenza            | 04-May        | 0.000         | 0.656            | 1.328         | 0.001         |
| Porto               | 20-Apr        | 0.000         | 0.333            | 0.842         | 0.000         |
| Sevilla             | 17-Apr        | 0.000         | 0.818            | 2.119         | 0.000         |
| Thiva               | 18-Apr        | 0.000         | 0.786            | 1.831         | 0.000         |

### Table 3: Metabolite Concentrations in Pear Juice Following Pesticide Application

| Scenario            | Metabolite (µg/L) | Parent (µg/L) | Parent (µg/L) | Parent (µg/L) |
|---------------------|-------------------|---------------|---------------|---------------|
|                     | CGA 357 261       | CGA 373466    | NOA 413163    | NOA 409480    | CGA 381318    |
| Châteaudun          | 0.000             | 0.010         | 4.973         | 0.000         | 0.000         |
| Hamburg             | 0.000             | 0.026         | 10.595        | 0.000         | 0.000         |
| Jokioinen           | 0.000             | 0.002         | 9.275         | 0.000         | 0.000         |
| Kremsmünster        | 0.000             | 0.014         | 3.521         | 0.000         | 0.000         |
| Okehampton          | 0.000             | 0.014         | 3.021         | 0.000         | 0.000         |
| Piacenza            | 0.000             | 0.010         | 2.725         | 0.000         | 0.000         |
| Porto               | 0.000             | 0.001         | 1.649         | 0.000         | 0.000         |
| Sevilla             | 0.000             | 0.010         | 4.749         | 0.000         | 0.000         |
| Thiva               | 0.000             | 0.006         | 4.005         | 0.000         | 0.000         |
### PELMO / 'Apples Early', 3 x 112.5 g/ha, 10 day interval, 60% crop interception (45 g/ha net of interception), BBCH 55-87

| Scenario | 1st Appl. Date | Parent (µg/L) | Metabolite (µg/L) |
|----------|----------------|---------------|-------------------|
|          |                |               | CGA 321113 | NOA 413161 | CGA 357276 |
| Châteaudun | 29-Apr  | 0.000 | 0.932  | 1.878  | 0.000  |
| Hamburg | 17-May | 0.000  | 1.071  | 2.724  | 0.004  |
| Jokioinen | 03-Jun | 0.000  | 0.598  | 3.680  | 0.000  |
| Kremsmünster | 16-May | 0.000  | 0.882  | 1.824  | 0.000  |
| Okehampton | 21-Apr  | 0.000  | 1.045  | 1.591  | 0.000  |
| Piacenza | 04-May | 0.000  | 0.860  | 1.190  | 0.002  |
| Porto | 20-Apr | 0.000  | 0.499  | 1.591  | 0.000  |
| Sevilla | 17-Apr | 0.000  | 0.490  | 1.638  | 0.000  |
| Thiva | 18-Apr | 0.000  | 0.529  | 1.350  | 0.000  |

### PELMO / 'Apples Late', 3 x 75 g/ha, 10 day interval, 65% crop interception (26.25 g/ha net of interception), BBCH 31-89

| Scenario | Metabolite (µg/L) |
|----------|-------------------|
|          | CGA 357261 | CGA 373466 | NOA 413163 | NOA 409480 | CGA 381318 |
| Châteaudun | 0.000 | 0.011 | 4.317 | 0.000 | 0.000 |
| Hamburg | 0.000 | 0.028 | 5.647 | 0.000 | 0.000 |
| Jokioinen | 0.000 | 0.003 | 7.485 | 0.000 | 0.000 |
| Kremsmünster | 0.000 | 0.014 | 3.878 | 0.000 | 0.000 |
| Okehampton | 0.000 | 0.026 | 3.151 | 0.000 | 0.000 |
| Piacenza | 0.000 | 0.032 | 2.741 | 0.000 | 0.000 |
| Porto | 0.000 | 0.006 | 1.552 | 0.000 | 0.000 |
| Sevilla | 0.000 | 0.002 | 3.521 | 0.000 | 0.000 |
| Thiva | 0.000 | 0.002 | 2.955 | 0.000 | 0.000 |

### PEARL / 'Apples Late', 3 x 75 g/ha, 10 day interval, 65% crop interception (26.25 g/ha net of interception), BBCH 31-89

| Scenario | 1st Appl. Date | Parent (µg/L) | Metabolite (µg/L) |
|----------|----------------|---------------|-------------------|
|          |                |               | CGA 321113 | NOA 413161 | CGA 357276 |
| Châteaudun | 11-Sep | 0.000 | 0.624  | 1.174  | 0.000  |
| Hamburg | 11-Sep | 0.000  | 1.192  | 2.885  | 0.003  |
| Jokioinen | 11-Sep | 0.000  | 0.545  | 2.774  | 0.000  |
| Kremsmünster | 11-Sep | 0.000  | 0.615  | 1.036  | 0.000  |
| Okehampton | 11-Sep  | 0.000  | 0.766  | 1.066  | 0.000  |
| Piacenza | 11-Sep | 0.000  | 0.886  | 1.162  | 0.002  |
| Porto | 11-Sep | 0.000  | 0.558  | 0.637  | 0.001  |
| Sevilla | 11-Sep | 0.000  | 0.469  | 0.859  | 0.001  |
| Thiva | 11-Sep | 0.000  | 0.535  | 0.905  | 0.000  |
### Table 1: Metabolite Concentrations in Water (µg/L) for Apples Late

| Scenario          | Metabolite (µg/L) | CGA 357 261 | CGA 373466 | NOA 413163 | NOA 409480 | CGA 381318 |
|-------------------|-------------------|-------------|------------|------------|------------|------------|
| Châteaudun        | CGA 357 261       | 0.000       | 0.005      | 2.448      | 0.000      | N/A        |
| Hamburg           | CGA 357 261       | 0.000       | 0.043      | 6.368      | 0.000      | N/A        |
| Jokioinen         | CGA 357 261       | 0.000       | 0.003      | 5.753      | 0.000      | N/A        |
| Kremsmünster      | CGA 357 261       | 0.000       | 0.011      | 2.373      | 0.000      | N/A        |
| Okehampton        | CGA 357 261       | 0.000       | 0.097      | 2.717      | 0.000      | N/A        |
| Piacenza          | CGA 357 261       | 0.000       | 0.038      | 3.034      | 0.000      | N/A        |
| Porto             | CGA 357 261       | 0.000       | 0.004      | 2.051      | 0.000      | N/A        |
| Sevilla           | CGA 357 261       | 0.000       | 0.006      | 2.158      | 0.000      | N/A        |

1 Route of degradation Trifloxystrobin → CGA 318381 not simulated using PEARL for Apples Early 3 x 112.5 g/ha.

### Table 2: Metabolite Concentrations in Water (µg/L) for Apples Late

| Scenario          | 1st Appl. Date | Parent (µg/L) | CGA 321113 | NOA 413161 | CGA 357276 |
|-------------------|---------------|---------------|------------|------------|------------|
| Châteaudun        | 11-Sep        | 0.000         | 0.565      | 1.060      | 0.000      |
| Hamburg           | 11-Sep        | 0.000         | 0.942      | 1.855      | 0.003      |
| Jokioinen         | 11-Sep        | 0.000         | 0.484      | 2.211      | 0.000      |
| Kremsmünster      | 11-Sep        | 0.000         | 0.629      | 1.181      | 0.000      |
| Okehampton        | 11-Sep        | 0.000         | 0.944      | 1.128      | 0.000      |
| Piacenza          | 11-Sep        | 0.000         | 0.801      | 0.874      | 0.002      |
| Porto             | 11-Sep        | 0.000         | 0.674      | 0.696      | 0.000      |
| Sevilla           | 11-Sep        | 0.000         | 0.312      | 1.107      | 0.000      |
| Thiva             | 11-Sep        | 0.000         | 0.374      | 0.903      | 0.000      |

### Table 3: Metabolite Concentrations in Water (µg/L) for Apples Late

| Scenario          | Metabolite (µg/L) | CGA 357 261 | CGA 373466 | NOA 413163 | NOA 409480 | CGA 381318 |
|-------------------|-------------------|-------------|------------|------------|------------|------------|
| Châteaudun        | CGA 357 261       | 0.000       | 0.005      | 2.318      | 0.000      | 0.000      |
| Hamburg           | CGA 357 261       | 0.000       | 0.035      | 4.201      | 0.000      | 0.000      |
| Jokioinen         | CGA 357 261       | 0.000       | 0.004      | 4.671      | 0.000      | 0.000      |
| Kremsmünster      | CGA 357 261       | 0.000       | 0.011      | 2.712      | 0.000      | 0.000      |
| Okehampton        | CGA 357 261       | 0.000       | 0.042      | 2.829      | 0.000      | 0.000      |
| Piacenza          | CGA 357 261       | 0.000       | 0.046      | 2.252      | 0.000      | 0.000      |
| Porto             | CGA 357 261       | 0.000       | 0.042      | 1.692      | 0.000      | 0.000      |
| Sevilla           | CGA 357 261       | 0.000       | 0.001      | 2.553      | 0.000      | 0.000      |
### Peer review of the pesticide risk assessment of the active substance trifloxystrobin

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**EFSA Journal 2017;15(10):4989**

| ScENARIO | 1st Appl. Date | Metabolite (µg/L) | Parent (µg/L) |
|----------|---------------|-------------------|---------------|
|          |               | CGA 321113 | NOA 413161 | CGA 357276 |
| PEARL / 'Apples Late', 3x1,125 g/ha, 10 day | Châteaudun 11-Sep | 0.000 | 0.937 | 1.774 | 0.000 |
|          | Hamburg 11-Sep | 0.000 | 1.789 | 4.368 | 0.005 |
|          | Jokioinen 11-Sep | 0.000 | 0.817 | 4.220 | 0.000 |
|          | Kremsmünster 11-Sep | 0.000 | 0.922 | 1.566 | 0.000 |
|          | Okehampton 11-Sep | 0.000 | 1.149 | 1.757 | 0.003 |
|          | Piacenza 11-Sep | 0.000 | 1.320 | 1.757 | 0.000 |
|          | Porto 11-Sep | 0.000 | 0.837 | 0.962 | 0.000 |
|          | Sevilla 11-Sep | 0.000 | 0.703 | 1.297 | 0.000 |
|          | Thiva 11-Sep | 0.000 | 0.803 | 1.364 | 0.000 |

| ScENARIO | Metabolite (µg/L) |
|----------|-------------------|
|          | CGA 357 261 | CGA 373466 | NOA 413163 | NOA 409480 | CGA 381318 |
|          | Châteaudun | 0.000 | 0.010 | 3.731 | 0.000 | 0.000 |
|          | Hamburg | 0.000 | 0.081 | 9.743 | 0.000 | 0.000 |
|          | Jokioinen | 0.000 | 0.006 | 8.843 | 0.000 | 0.000 |
|          | Kremsmünster | 0.000 | 0.022 | 3.623 | 0.000 | 0.000 |
|          | Okehampton | 0.000 | 0.057 | 3.837 | 0.000 | 0.000 |
|          | Piacenza | 0.000 | 0.071 | 4.644 | 0.000 | 0.000 |
|          | Porto | 0.000 | 0.039 | 2.346 | 0.000 | 0.000 |
|          | Sevilla | 0.000 | 0.007 | 3.281 | 0.000 | 0.000 |
|          | Thiva | 0.000 | 0.013 | 3.281 | 0.000 | 0.000 |

| ScENARIO | 1st Appl. Date | Metabolite (µg/L) | Parent (µg/L) |
|----------|---------------|-------------------|---------------|
|          |               | CGA 321113 | NOA 413161 | CGA 357276 |
| PELMO / 'Apples Late', 3x1,125 g/ha, 10 day | Châteaudun 11-Sep | 0.000 | 0.847 | 1.600 | 0.000 |
|          | Hamburg 11-Sep | 0.000 | 1.413 | 2.807 | 0.005 |
|          | Jokioinen 11-Sep | 0.000 | 0.726 | 3.357 | 0.000 |
|          | Kremsmünster 11-Sep | 0.000 | 0.943 | 1.787 | 0.000 |
|          | Okehampton 11-Sep | 0.000 | 1.417 | 1.701 | 0.001 |
|          | Piacenza 11-Sep | 0.000 | 1.201 | 1.318 | 0.003 |
|          | Porto 11-Sep | 0.000 | 1.011 | 1.052 | 0.000 |
|          | Sevilla 11-Sep | 0.000 | 0.467 | 1.675 | 0.000 |
### Thiva

| Scenario | Metabolite (µg/L) | CGA 357 261 | CGA 373466 | NOA 413163 | NOA 409480 | CGA 381318 |
|----------|------------------|--------------|-------------|-------------|-------------|-------------|
| Châteaudun | 0.000 | 0.000 | 0.561 | | | 1.365 | 0.000 |
| Hamburg | 0.000 | 0.066 | 0.000 | | | 0.000 | 0.000 |
| Jokioinen | 0.000 | 0.008 | 0.000 | | | 0.000 | 0.000 |
| Kremsmünster | 0.000 | 0.023 | 0.000 | | | 0.000 | 0.000 |
| Okehampton | 0.000 | 0.080 | 0.000 | | | 0.000 | 0.000 |
| Piacenza | 0.000 | 0.082 | 0.000 | | | 0.000 | 0.000 |
| Porto | 0.000 | 0.077 | 0.000 | | | 0.000 | 0.000 |
| Sevilla | 0.000 | 0.001 | 0.000 | | | 0.000 | 0.000 |
| Thiva | 0.000 | 0.003 | 0.000 | | | 0.000 | 0.000 |

### Châteaudun

| Scenario | 1st Appl. Date | Parent (µg/L) | Metabolite (µg/L) | CGA 321113 | NOA 413161 | CGA 357276 |
|----------|----------------|--------------|------------------|-------------|-------------|-------------|
| Châteaudun | 05-Apr | 0.000 | 0.000 | 0.822 | 2.019 | 0.000 |
| Hamburg | 19-Apr | 0.000 | 0.000 | 0.888 | 2.200 | 0.002 |
| Kremsmünster | 04-May | 0.000 | 0.000 | 0.684 | 1.295 | 0.000 |
| Piacenza | 05-Apr | 0.000 | 0.000 | 0.580 | 1.158 | 0.001 |
| Porto | 18-Mar | 0.000 | 0.000 | 0.327 | 0.751 | 0.000 |
| Sevilla | 04-Apr | 0.000 | 0.000 | 0.511 | 1.200 | 0.000 |
| Thiva | 19-Mar | 0.000 | 0.000 | 0.278 | 0.986 | 0.000 |

### PEARL / Vines Early

| Scenario | Metabolite (µg/L) | CGA 357 261 | CGA 373466 | NOA 413163 | NOA 409480 | CGA 381318 |
|----------|------------------|--------------|-------------|-------------|-------------|-------------|
| Châteaudun | 0.000 | 0.008 | 0.000 | | | N/A¹ |
| Hamburg | 0.000 | 0.014 | 0.000 | | | N/A¹ |
| Kremsmünster | 0.000 | 0.013 | 0.000 | | | N/A¹ |
| Piacenza | 0.000 | 0.007 | 0.000 | | | N/A¹ |
| Porto | 0.000 | 0.001 | 0.000 | | | N/A¹ |
| Sevilla | 0.000 | 0.004 | 0.000 | | | N/A¹ |
| Thiva | 0.000 | 0.000 | 0.000 | | | N/A¹ |

¹ Route of degradation Trifloxystrobin→CGA 318381 not simulated using PEARL for Vines Early 3 x 125 g/ha.
### PELOMO / 'Vines Early', 3x125 g/ha, 10 day interval, 50-60-60 % crop interception (62.5, 50, 50 g/ha net of interception), BBCH 12-89

| Scenario       | 1st Appl. Date | Parent (µg/L) | Metabolite (µg/L) | CGA 321113 | NOA 413161 | CGA 357276 |
|----------------|----------------|---------------|-------------------|------------|------------|------------|
| Châteaudun     | 05-Apr         | 0.000         | 0.876             | 1.861      | 0.000      |
| Hamburg        | 19-Apr         | 0.000         | 0.983             | 2.540      | 0.003      |
| Kremsmünster   | 04-May         | 0.000         | 0.868             | 1.694      | 0.000      |
| Piacenza       | 05-Apr         | 0.000         | 0.860             | 1.261      | 0.002      |
| Porto          | 18-Mar         | 0.000         | 0.555             | 0.912      | 0.000      |
| Sevilla        | 04-Apr         | 0.000         | 0.342             | 1.002      | 0.000      |
| Thiva          | 19-Mar         | 0.000         | 0.368             | 1.134      | 0.000      |

### PEARL / 'Vines Late', 3x125 g/ha, 10 day interval, 75 % crop interception (31.25 g/ha net of interception), BBCH 12-89

| Scenario       | Metabolite (µg/L) | CGA 357 261 | CGA 373466 | NOA 413163 | NOA 409480 | CGA 381318 |
|----------------|-------------------|------------|------------|------------|------------|------------|
| Châteaudun     | 0.000             | 0.007      | 2.363      | 0.000      | N/A¹       |
| Hamburg        | 0.000             | 0.036      | 2.961      | 0.000      | N/A¹       |
| Kremsmünster   | 0.000             | 0.014      | 1.830      | 0.000      | N/A¹       |
| Piacenza       | 0.000             | 0.035      | 2.537      | 0.000      | N/A¹       |

1. N/A: Not applicable.
### Table 1: Metabolite Concentrations

| Scenario | 1st Appl. Date | Parent (µg/L) | Metabolite (µg/L) |
|----------|---------------|---------------|-------------------|
| **PELMO / 'Vines Late', 3x125 g/ha, 10 day interval, 75% crop interception, BBCH 12-89** | | | |
| Châteaudun | 27-Sep | 0.000 | 0.638 1.127 0.000 |
| Hamburg | 27-Sep | 0.000 | 0.927 1.491 0.002 |
| Kremsmünster | 27-Sep | 0.000 | 0.677 1.005 0.000 |
| Piacenza | 27-Sep | 0.000 | 0.850 0.951 0.002 |
| Porto | 27-Sep | 0.000 | 0.790 0.828 0.000 |
| Sevilla | 27-Sep | 0.000 | 0.242 0.857 0.000 |
| Thiva | 27-Sep | 0.000 | 0.424 0.968 0.000 |

| **PELMO / 'Vines Late', 3x125 g/ha, 10 day interval, 75% crop interception, BBCH 12-89** | | | |
| Châteaudun | 0.000 | 0.007 | 2.532 0.000 0.000 |
| Hamburg | 0.000 | 0.040 | 3.476 0.000 0.000 |
| Kremsmünster | 0.000 | 0.021 | 2.277 0.000 0.000 |
| Piacenza | 0.000 | 0.045 | 2.538 0.000 0.000 |
| Porto | 0.000 | 0.062 | 2.084 0.000 0.000 |
| Sevilla | 0.000 | 0.001 | 2.135 0.000 0.000 |
| Thiva | 0.000 | 0.003 | 2.458 0.000 0.000 |

### Notes
1. Route of degradation Trifloxystrobin→CGA 318381 not simulated using PEARL for Vines Late 3 x 125 g/ha
| Scenario | 1st Appl. Date | Parent (µg/L) | Metabolite (µg/L) |
|----------|---------------|---------------|------------------|
| PEALMO / 'Strawberry Early', 2 x 125 g/ha, 7 day interval, 30% crop interception (87.5 g/ha net of interception), BBCH 10-92 | Parent (µg/L) | Metabolite (µg/L) |
| Hamburg | 16-Mar | 0.000 | 0.831 | 2.207 | 0.000 | 0.000 |
| Jokioinen | 15-May | 0.000 | 0.305 | 2.519 | 0.000 |
| Kremsmünster | 15-Mar | 0.000 | 0.679 | 1.593 | 0.000 |
| Sevilla | 01-Dec | 0.000 | 0.073 | 0.354 | 0.000 |

1 Route of degradation Trifloxystrobin→CGA 318381 not simulated using PEARL for Strawberry Early 2 x 125 g/ha.

| Scenario | Metabolite (µg/L) |
|----------|------------------|
| PEALMO / 'Strawberry Late', 2 x 150 g/ha, 7 day interval, 60% crop interception (60 g/ha net of interception), BBCH 55-89 | Metabolite (µg/L) |
| Hamburg | 0.000 | 0.011 | 4.352 | 0.000 | 0.000 |
| Jokioinen | 0.000 | 0.001 | 5.009 | 0.000 | 0.000 |
| Kremsmünster | 0.000 | 0.007 | 3.577 | 0.000 | 0.000 |
| Sevilla | 0.000 | 0.000 | 0.810 | 0.000 | 0.000 |

| Scenario | Metabolite (µg/L) |
|----------|------------------|
| PEALMO / 'Strawberry Late', 2 x 150 g/ha, 7 day interval, 60% crop interception (60 g/ha net of interception), BBCH 55-89 | Metabolite (µg/L) |
| Hamburg | 23-Aug | 0.000 | 1.014 | 2.774 | 0.002 |
| Jokioinen | 23-Aug | 0.000 | 0.337 | 2.212 | 0.000 |
| Kremsmünster | 23-Aug | 0.000 | 0.641 | 1.270 | 0.000 |
| Sevilla | 23-Aug | 0.000 | 0.085 | 0.748 | 0.000 |

1 Route of degradation Trifloxystrobin→CGA 318381 not simulated using PEARL for Strawberry Late 2 x 150 g/ha.
Hamburg 23-Aug 0.000 1.034 2.173 0.004
Jokioinen 23-Aug 0.000 0.359 1.106 0.000
Kremsmünster 23-Aug 0.000 0.704 1.357 0.000
Sevilla 23-Aug 0.000 0.080 0.619 0.000

PELCMO / 'Strawberry Late', 2x150 g/ha, 7 day interval, 60% crop interception (60 g/a net of interception), BBCH 55-89

| Scenario | Metabolite (µg/L) |
|----------|------------------|
|          | CGA 357 261      | CGA 373466 | NOA 413163 | NOA 409480 | CGA 381318 |
| Hamburg  | 0.000            | 0.031      | 5.010      | 0.000      | 0.000      |
| Jokioinen| 0.000            | 0.002      | 4.565      | 0.000      | 0.000      |
| Kremsmünster | 0.000   | 0.014      | 3.105      | 0.000      | 0.000      |
| Sevilla  | 0.000            | 0.000      | 1.588      | 0.000      | 0.000      |

PEC surface water and PEC sediment (Regulation (EU) N° 284/2013, Annex Part A, points 9.2.5 / 9.3.1)

Parent
Parameters used in FOCUSsw step 1 and 2

Molecular weight (g/mol): 408.7

KOC (mL/g): 2287

DT50 soil (d): 0.6 days (geomean of lab and field data)

DT50 water/sediment system (d): 1.69 (geomean from sediment water studies)

DT50 water (d): 1.69 (total system value)

DT50 sediment (d): 1.69 (total system value)

Crop interception (%):

Parameters used in FOCUSsw step 3 (if performed)

Application rate

Version control no. of FOCUS calculator: 2.1

Water solubility (mg/L): 0.61

Vapour pressure: 3.4E-6 Pa at 20°C

Koc (mL/g): 2287

1/n:0.96

Q10=2.58, Walker equation coefficient 0.7

Crop uptake factor:

N/A
Crop and growth stage: Apples BBCH 31-89
Number of applications: 3
Interval (d): 10
Application rate(s): 75 g a.s./ha
Application window: Early spray drift / Mar-May
Crop Interception: Average (40%)

| FOCUS STEP 1 Scenario | Day after overall maximum | PEC_{SW} (µg/L) | PEC_{SED} (µg/kg) |
|-----------------------|---------------------------|-----------------|-------------------|
|                       |                           | Actual          | TWA               | Actual           | TWA               |
| 0 h                   |                           | 13.4731         |                   | 141.1961         |                   |
| 24 h                  |                           | 5.2928          |                   | 121.0461         | 131.1211          |
| 2 d                   |                           | 3.5120          |                   | 80.3205          | 115.2082          |
| 4 d                   |                           | 1.5464          |                   | 35.3654          | 85.0060           |
| 7 d                   |                           | 0.4518          |                   | 10.3325          | 57.2940           |
| 14 d                  |                           | 0.0256          |                   | 0.5852           | 30.3445           |
| 21 d                  |                           | 0.0014          |                   | 0.0331           | 20.2938           |
| 28 d                  |                           | 0.0001          |                   | 0.0019           | 15.2231           |
| 42 d                  |                           | 0.0000          |                   | 0.0000           | 10.1488           |

| FOCUS STEP 2 Scenario | Day after overall maximum | PEC_{SW} (µg/L) Multiple Applications (Single Application) | PEC_{SED} (µg/kg) Multiple Applications (Single Application) |
|-----------------------|---------------------------|------------------------------------------------------------|------------------------------------------------------------|
|                       |                           | Actual TWA                                                 | Actual TWA                                                 |
|                       |                           |                                                             |                                                             |
| Northern EU           | 0 h                       | 6.0232 (2.4119)                                            | 15.3017 (18.2367)                                          |
|                       | 24 h                      | 2.0013 (1.1954)                                            | 4.0123 (4.8556)                                            |
|                       |                           | 2.7554 (3.3296)                                            | 12.6462 (15.1385)                                          |
|                       |                           | 1.7034 (2.0554)                                            | 4.5359 (5.4139)                                            |
|                       |                           | 1.0553 (1.2723)                                            | 1.3252 (1.5817)                                            |
|                       |                           | 0.5422 (0.6535)                                            | 0.0751 (0.0896)                                            |
|                       |                           | 0.3620 (0.4363)                                            | 0.0043 (0.0051)                                            |
|                       |                           | 0.2715 (0.3273)                                            | 0.0002 (0.0003)                                            |
|                       |                           | 0.1810 (0.2812)                                            | 0.0000 (0.0000)                                            |
|                       | 24 h                      | 6.0232 (2.4119)                                            | 15.3017 (18.2367)                                          |
|                       | 2 d                       | 0.9956 (1.1954)                                            | 2.7554 (3.3296)                                            |
|                       |                           | 1.7034 (2.0554)                                            | 4.5359 (5.4139)                                            |
|                       |                           | 1.0553 (1.2723)                                            | 1.3252 (1.5817)                                            |
|                       |                           | 0.5422 (0.6535)                                            | 0.0751 (0.0896)                                            |
|                       |                           | 0.3620 (0.4363)                                            | 0.0043 (0.0051)                                            |
|                       |                           | 0.2715 (0.3273)                                            | 0.0002 (0.0003)                                            |
|                       |                           | 0.1810 (0.2812)                                            | 0.0000 (0.0000)                                            |
| Southern EU           | 0 h                       | 6.0232 (2.4119)                                            | 15.3017 (18.2367)                                          |
|                       | 24 h                      | 2.0013 (2.4119)                                            | 4.0123 (4.8556)                                            |
|                       |                           | 2.7554 (3.3296)                                            | 12.6462 (15.1385)                                          |
|                       |                           | 1.7034 (2.0554)                                            | 4.5359 (5.4139)                                            |
|                       |                           | 1.0553 (1.2723)                                            | 1.3252 (1.5817)                                            |
|                       |                           | 0.5422 (0.6535)                                            | 0.0751 (0.0896)                                            |
|                       |                           | 0.3620 (0.4363)                                            | 0.0043 (0.0051)                                            |
|                       |                           | 0.2715 (0.3273)                                            | 0.0002 (0.0003)                                            |
|                       |                           | 0.1810 (0.2812)                                            | 0.0000 (0.0000)                                            |
### FOCUS STEP 3

| Scenario | Water body | Day after overall maximum | PEC\textsubscript{SW} (µg/L) | PEC\textsubscript{SED} (µg/kg) |
|----------|------------|---------------------------|-----------------------------|-------------------------------|
|          |            |                           | Actual                      | TWA                           |
| D3       | Ditch      | 0 h                       | 4.694 (5.819)               | 4.071 (3.342)                 |
|          |            | 24 h                      | 2.170 (2.688)               | 3.404 (4.219)                 |
|          |            | 2 d                       | 0.421 (0.517)               | 2.290 (2.836)                 |
|          |            | 4 d                       | 0.0437 (0.0493)             | 1.214 (1.501)                 |
|          |            | 7 d                       | 0.0197 (0.0205)             | 0.706 (0.871)                 |
|          |            | 14 d                      | 0.00683 (0.00592)           | 0.566 (0.441)                 |
|          |            | 21 d                      | 0.00379 (0.00288)           | 0.451 (0.295)                 |
|          |            | 28 d                      | 0.00253 (0.00177)           | 0.442 (0.222)                 |
|          |            | 42 d                      | 0.00151 (0.000953)          | 0.334 (0.149)                 |
| D4       | Pond       | 0 h                       | 0.317 (0.353)               | 0.862 (0.452)                 |
|          |            | 24 h                      | 0.242 (0.269)               | 0.277 (0.308)                 |
|          |            | 2 d                       | 0.187 (0.206)               | 0.254 (0.272)                 |
|          |            | 4 d                       | 0.113 (0.123)               | 0.227 (0.217)                 |
|          |            | 7 d                       | 0.0555 (0.0593)             | 0.191 (0.161)                 |
|          |            | 14 d                      | 0.0129 (0.0128)             | 0.138 (0.0956)                |
|          |            | 21 d                      | 0.00415 (0.00360)           | 0.110 (0.0661)                |
|          |            | 28 d                      | 0.00149 (0.00107)           | 0.0860 (0.0501)               |
|          |            | 42 d                      | 0.000606 (0.000340)         | 0.0733 (0.0336)               |
| D4       | Stream     | 0 h                       | 4.835 (6.046)               | 0.699 (0.675)                 |
|          |            | 24 h                      | 0.00122 (0.00142)           | 0.753 (0.942)                 |
|          |            | 2 d                       | 0.000927 (0.00106)          | 0.377 (0.472)                 |
|          |            | 4 d                       | 0.000558 (0.000620)         | 0.189 (0.236)                 |
### Table 1: Concentration of trifloxystrobin in different environmental compartments

|          | 7 d          | 14 d         | 21 d         | 28 d         | 42 d         |
|----------|--------------|--------------|--------------|--------------|--------------|
|          | 0.000296     | 0.000122     | 0.000077     | 0.000055     | 0.000034     |
|          | (0.000311)   | (0.000113)   | (0.000065)   | (0.000044)   | (0.000026)   |
|          | 0.108 (0.135)| 0.0943 (0.0677)| 0.0630 (0.0451)| 0.0473 (0.0339)| 0.0315 (0.0226)|
|          | 0.328 (0.255)| 0.245 (0.173)| 0.206 (0.139)| 0.182 (0.120)| 0.152 (0.0968)|
|          | 0.469 (0.410)| 0.376 (0.310)| 0.334 (0.259)| 0.311 (0.226)| 0.272 (0.187)|

### Table 2: Concentration of trifloxystrobin in D5 and R1 compartments

|          | 0 h          | 24 h         | 2 d          | 4 d          | 7 d          |
|----------|--------------|--------------|--------------|--------------|--------------|
|          | 0.325 (0.353)| 0.275 (0.297)| 0.233 (0.252)| 0.171 (0.183)| 0.110 (0.117)|
|          |              | 0.298 (0.324)| 0.276 (0.299)| 0.238 (0.257)| 0.196 (0.210)|
|          |              | 0.888 (0.596)| 0.872 (0.587)| 0.829 (0.552)| 0.759 (0.489)|
|          |              |              | 0.894 (0.599)|              | 0.867 (0.584)|
|          |              |              |              |              |              | 0.773 (0.495)|
|          |              |              |              |              |              | 0.781 (0.453)|
|          |              |              |              |              |              | 0.737 (0.391)|

|          | 0.180 (0.0073)| 0.0368 (0.00276)| 0.00335 (0.000739)| 4.876 (6.101)| 0.000170 (0.000208)|
|          |              |              |              |              |              | 0.284 (0.291)|
|          | 0.142 (0.0973)| 0.122 (0.0741)| 0.110 (0.0499)| 0.325 (0.407)| 0.000118 (0.000143)|
|          |              |              |              | 0.244 (0.239)|              | 0.265 (0.267)|
|          |              |              |              | 0.213 (0.200)|              | 0.248 (0.244)|
|          |              |              |              |              |              | 0.220 (0.209)|
|          |              |              |              |              |              | 0.193 (0.175)|

### Table 3: Concentration of trifloxystrobin in D5, R1, and R2 compartments

|          | 0 h          | 24 h         | 2 d          | 4 d          | 7 d          |
|----------|--------------|--------------|--------------|--------------|--------------|
|          | 0.000038     | 0.000018     | 0.0000124    | 0.000038     | 0.000032     |
|          | (0.000044)   | (0.000020)   | (0.000007)   | (0.000006)   | (0.000011)   |
|          | 0.0465       | 0.0233       | 0.0298       | 0.0224       | 0.0190       |
|          | (0.0582)     | (0.0291)     | (0.0194)     | (0.0146)     | (0.00971)    |
|          | 0.140 (0.110)| 0.107 (0.0741)| 0.0918 (0.0595)| 0.0819 (0.0512)| 0.0693 (0.0414)|
|          | 0.193 (0.175)| 0.157 (0.132)| 0.138 (0.110)| 0.136 (0.0963)| 0.126 (0.0795)|

### Table 4: Concentration of trifloxystrobin in D5 and R1 compartments

|          | 0 h          | 24 h         | 2 d          | 4 d          |
|----------|--------------|--------------|--------------|--------------|
|          | 0.323 (0.353)| 0.261 (0.284)| 0.212 (0.229)| 0.142 (0.152)|
|     |        |        |        |        |        |
|-----|--------|--------|--------|--------|--------|
|     | 7 d    | 14 d   | 21 d   | 28 d   | 42 d   |
|     | 0.0808 | 0.0243 | 0.00868| 0.0752 | 0.00376|
|     | (0.0852)| (0.0247)| (0.00829)| (0.00250)| (0.000569)|
|     | 0.172  | 0.143  | 0.134  | 0.109  | 0.0967  |
|     | (0.185)| (0.117)| (0.0828)| (0.0634)| (0.0426) |
|     | 0.654  | 0.541  | 0.473  | 0.427  | 0.366   |
|     | (0.427)| (0.335)| (0.275)| (0.234)| (0.188) |
|     | 0.757  | 0.702  | 0.650  | 0.656  | 0.644   |
|     | (0.501)| (0.463)| (0.423)| (0.389)| (0.335) |
| R1  | Stream | 0 h    | 24 h   | 2 d    | 4 d    |
|     | 3.758  | 0.000775| 0.000561| 0.000311| 0.000112|
|     | (4.701)| (0.000976)| (0.000704)| (0.000388)| (0.000140)|
|     | 0.498  | 0.641  | 0.321  | 0.161  | 0.0919  |
|     | (0.578)| (0.802)| (0.401)| (0.201)| (0.115) |
|     | 0.431  | 0.381  | 0.315  | 0.315  | 0.261   |
|     | (0.475)| (0.397)| (0.297)| (0.297)| (0.219) |
|     | 0.470  | 0.441  | 0.396  | 0.396  | 0.350   |
|     | (0.536)| (0.491)| (0.422)| (0.422)| (0.352) |
|     | 0 h    | 24 h   | 2 d    | 4 d    | 7 d    |
|     | 5.065  | 0.000560| 0.000411| 0.000235| 0.000119|
|     | (6.337)| (0.000671)| (0.000486)| (0.000269)| (0.000128)|
|     | 0.504  | 0.539  | 0.270  | 0.135  | 0.0772  |
|     | (0.486)| (0.674)| (0.337)| (0.169)| (0.0966)|
|     | 0.431  | 0.375  | 0.303  | 0.245  | 0.245   |
|     | (0.398)| (0.332)| (0.248)| (0.183)| (0.183) |
|     | 0.473  | 0.440  | 0.391  | 0.341  | 0.341   |
|     | (0.448)| (0.410)| (0.351)| (0.293)| (0.293) |
| R2  | Stream | 0 h    | 24 h   | 2 d    | 4 d    |
|     | 0.000560| 0.000411| 0.000235| 0.000119| 0.000043|
|     | (0.000671)| (0.000486)| (0.000269)| (0.000128)| (0.000040)|
|     | 0.386  | 0.461  | 0.135  | 0.0772 | 0.0346  |
|     | (0.0483)| (0.0322)| (0.169)| (0.0966)| (0.0242)|
|     | 0.186  | 0.159  | 0.142  | 0.245  | 0.142   |
|     | (0.124)| (0.0996)| (0.0857)| (0.183)| (0.0857)|
|     | 0.276  | 0.242  | 0.228  | 0.245  | 0.245   |
|     | (0.221)| (0.184)| (0.161)| (0.293)| (0.293) |
|     | 0.207  | 0.207  | 0.207  | 0.207  | 0.207   |
|     | (0.133)| (0.133)| (0.133)| (0.133)| (0.133) |
### FOCUS Step 3 - Scenario

| Scenario | Max PEC<sub>sw</sub> (µg/L) | Mitigation Required for First Tier RAC (0.052 µg/L) (%) | Mitigation Required for Higher Tier RAC (0.128 µg/L) (%) |
|----------|-----------------------------|--------------------------------------------------------|------------------------------------------------------|
| D3-Ditch | 4.694                       | 99.1                                                  | 97.8                                                 |
| D4-Pond  | 0.317                       | 85.3                                                  | 63.7                                                 |
| D4-Stream| 4.835                       | 99.1                                                  | 97.9                                                 |

### FOCUS Step 4 - Percentage mitigation required to meet calculated RACs. Shaded cells require more than 95% mitigation so indicate the situations where low risk was not demonstrated, when complying with FOCUS 2007 Landscape and mitigation guidance. No FOCUS scenario indicated low risk. Only half scenarios (ponds) have low risk indicated.
Crop and growth stage: Apples BBCH 61-85 
Number of applications: 3 
Interval (d): 10 
Application rate(s): 112.5 g a.s./ha 
Application window: Early spray drift / Mar-May 
Crop Interception: Average (40%)

|          | D5-Pond | D5-Stream | R1-Pond | R1-Stream | R2-Stream | R3-Stream | R4-Stream |
|----------|---------|-----------|---------|-----------|-----------|-----------|-----------|
|          | 0.325   | 4.876     | 0.323   | 3.758     | 5.065     | 5.317     | 3.78      |
|          | 0.353   | 6.101     | 0.353   | 4.701     | 6.337     | 6.651     | 4.729     |
|          | 85.3    | 99.1      | 88.3    | 98.9      | 99.2      | 99.2      | 98.9      |
|          |         |           |         |           |           |           |           |
|          | 63.7    | 97.9      | 63.7    | 97.3      | 98.0      | 98.1      | 97.3      |

| FOCUS STEP 1 | Day after overall maximum | PEC$_{SW}$ (µg/L) | PEC$_{SED}$ (µg/kg) |
|---------------|---------------------------|-------------------|---------------------|
|               |                           | Actual            | TWA                 | Actual            | TWA                 |
| 0 h           |                           | 20.2097           | 211.7941            |                    |                     |
| 24 h          |                           | 7.9392            | 14.0744             | 181.5692           | 196.6816            |
| 2 d           |                           | 5.2681            | 10.2935             | 120.4808           | 172.8123            |
| 4 d           |                           | 2.3195            | 6.9440              | 53.0480            | 127.5090            |
| 7 d           |                           | 0.6777            | 4.5399              | 15.4987            | 85.9410             |
| 14 d          |                           | 0.0384            | 2.3813              | 0.8779             | 45.5168             |
| 21 d          |                           | 0.0022            | 1.5917              | 0.0497             | 30.4407             |
| 28 d          |                           | 0.0001            | 1.1940              | 0.0028             | 22.8346             |
| 42 d          |                           | 0.0000            | 0.7960              | 0.0000             | 15.2232             |

| FOCUS STEP 2 | Day after overall maximum | PEC$_{SW}$ (µg/L) Multiple Applications (Single Application) | PEC$_{SED}$ (µg/kg) Multiple Applications (Single Application) |
|---------------|---------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
|               |                           | Actual            | TWA                 | Actual            | TWA                 |
| Northern EU   |                           | 9.0348            | (10.9489)           | 22.9526           | (27.3550)           |
## Peer review of the pesticide risk assessment of the active substance trifloxystrobin

Peer review of the pesticide risk assessment of the active substance trifloxystrobin

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### FOCUS STEP 3

| Water body | Day after overall maximum | PEC<sub>sw</sub> (µg/L) Actual | TWA | PEC<sub>sed</sub> (µg/kg) Actual | TWA |
|------------|---------------------------|-------------------------------|-----|--------------------------------|-----|
| **D3**     | Ditch                     |                               |     |                                |     |
| 0 h        |                           | 7.041 (8.729)                 | 5.732 (4.998) |                           |     |
| 24 h       |                           | 3.258 (4.035)                 | 5.159 (6.330) | 5.354 (4.528) | 5.678 (4.926) |
| 2 d        |                           | 0.633 (0.778)                 | 3.650 (4.256) | 4.811 (3.894) | 5.540 (4.745) |
| 4 d        |                           | 0.0652 (0.0743)               | 1.985 (2.253) | 4.023 (3.016) | 5.167 (4.290) |
| 7 d        |                           | 0.0287 (0.0306)               | 1.156 (1.308) | 3.361 (2.312) | 4.654 (3.704) |
| 14 d       |                           | 0.00945 (0.00883)             | 0.996 (0.662) | 2.659 (1.625) | 3.887 (2.878) |
| 21 d       |                           | 0.00500 (0.00428)             | 0.677 (0.444) | 2.314 (1.323) | 3.444 (2.426) |
| 28 d       |                           | 0.00324 (0.00263)             | 0.511 (0.333) | 2.090 (1.142) | 3.146 (2.136) |
| 42 d       |                           | 0.0322 (0.00142)              | 0.374 (0.223) | 1.798 (0.927) | 2.820 (1.773) |
| **D4**     | Pond                      |                               |     |                                |     |
| 0 h        |                           | 0.475 (0.530)                 | 1.221 (0.673) |                           |     |
| 24 h       |                           | 0.364 (0.404)                 | 0.416 (0.462) | 1.210 (0.666) | 1.220 (0.673) |
| 2 d        |                           | 0.280 (0.309)                 | 0.367 (0.408) | 1.184 (0.648) | 1.217 (0.671) |
| 4 d        |                           | 0.170 (0.185)                 | 0.294 (0.325) | 1.112 (0.599) | 1.205 (0.662) |
| 7 d        |                           | 0.0837 (0.0891)               | 0.221 (0.242) | 0.998 (0.522) | 1.175 (0.641) |
| 14 d       |                           | 0.0170 (0.0167)               | 0.207 (0.143) | 0.793 (0.384) | 1.081 (0.577) |
| 21 d       |                           | 0.00436 (0.00362)             | 0.182 (0.0983) | 0.671 (0.310) | 1.024 (0.515) |
| 28 d       |                           | 0.00195 (0.00134)             | 0.179 (0.0743) | 0.593 (0.267) | 0.977 (0.466) |
|       | 42 d | 0.000865 (0.000486) | 0.127 (0.0498) | 0.496 (0.216) | 0.874 (0.396) |
|-------|------|---------------------|----------------|--------------|--------------|
| D4    |      |                     |                |              |              |
|       | 0 h  | 7.354 (9.197)       | 1.383 (1.264)  | 1.190 (1.034) | 1.311 (1.181) |
|       | 24 h | 0.00310 (0.00357)   | 1.426 (1.784)  | 1.109 (1.034) | 1.224 (1.082) |
|       | 2 d  | 0.00220 (0.00249)   | 0.715 (0.893)  | 1.035 (0.862) | 1.224 (1.082) |
|       | 4 d  | 0.00136 (0.00148)   | 0.358 (0.448)  | 0.835 (0.644) | 1.087 (0.926) |
|       | 7 d  | 0.000717 (0.000722) | 0.205 (0.256)  | 0.671 (0.477) | 0.946 (0.772) |
|       | 14 d | 0.000289 (0.000248) | 0.184 (0.128)  | 0.505 (0.324) | 0.764 (0.583) |
|       | 21 d | 0.000178 (0.000137) | 0.162 (0.0856) | 0.426 (0.261) | 0.708 (0.486) |
|       | 28 d | 0.000128 (0.000092) | 0.122 (0.0642) | 0.377 (0.225) | 0.657 (0.425) |
|       | 42 d | 0.000073 (0.000049) | 0.0816 (0.0429)| 0.314 (0.182) | 0.572 (0.351) |
| D5    |      |                     |                |              |              |
|       | 0 h  | 0.447 (0.530)       | 1.179 (0.693)  |              |              |
|       | 24 h | 0.346 (0.409)       | 0.397 (0.465)  | 1.169 (0.685) | 1.178 (0.693) |
|       | 2 d  | 0.269 (0.317)       | 0.366 (0.413)  | 1.145 (0.664) | 1.176 (0.690) |
|       | 4 d  | 0.166 (0.195)       | 0.315 (0.332)  | 1.07 (0.607)  | 1.165 (0.680) |
|       | 7 d  | 0.764 (0.0880)      | 0.257 (0.248)  | 0.972 (0.0411)| 1.138 (0.656) |
|       | 14 d | 0.0150 (0.0160)     | 0.169 (0.145)  | 0.796 (0.387) | 1.053 (0.586) |
|       | 21 d | 0.00449 (0.00414)   | 0.151 (0.0995) | 0.691 (0.314) | 0.971 (0.522) |
|       | 28 d | 0.00209 (0.00161)   | 0.146 (0.0752) | 0.621 (0.271) | 0.959 (0.472) |
|       | 42 d | 0.000787 (0.000472) | 0.138 (0.0505) | 0.530 (0.219) | 0.897 (0.401) |
| D5    |      |                     |                |              |              |
|       | 0 h  | 7.752 (9.695)       | 0.988 (1.074)  |              |              |
|       | 24 h | 0.00203 (0.00249)   | 1.202 (1.504)  | 0.830 (0.880) | 0.925 (0.997) |
|       | 2 d  | 0.00157 (0.00191)   | 0.602 (0.753)  | 0.709 (0.733) | 0.856 (0.912) |
|       | 4 d  | 0.00119 (0.00142)   | 0.302 (0.377)  | 0.555 (0.547) | 0.749 (0.781) |
|       | 7 d  | 0.000652 (0.000756) | 0.173 (0.216)  | 0.434 (0.404) | 0.641 (0.651) |
|       | 14 d | 0.000321 (0.000344) | 0.0867 (0.108) | 0.317 (0.274) | 0.505 (0.491) |
|                |                |                |                |
|----------------|----------------|----------------|----------------|
| 21 d           | 0.000173 (0.000175) | 0.0791 (0.0723) | 0.266 (0.221)   | 0.434 (0.410) |
| 28 d           | 0.000114 (0.000110) | 0.0595 (0.0543) | 0.234 (0.190)   | 0.388 (0.359) |
| 42 d           | 0.000064 (0.000058) | 0.0512 (0.0362) | 0.195 (0.154)   | 0.330 (0.296) |
| R1 Pond 0 h    | 0.453 (0.530)     |                | 1.102 (0.634)   |                |
| 24 h           | 0.337 (0.393)     | 0.392 (0.456)   | 1.095 (0.626)   | 1.101 (0.634)  |
| 4 d            | 0.252 (0.293)     | 0.350 (0.398)   | 1.068 (0.607)   | 1.098 (0.631)  |
| 7 d            | 0.145 (0.166)     | 0.290 (0.311)   | 1.002 (0.555)   | 1.086 (0.622)  |
| 14 d           | 0.0659 (0.0743)   | 0.227 (0.227)   | 0.900 (0.477)   | 1.058 (0.600)  |
| 21 d           | 0.0135 (0.0140)   | 0.161 (0.131)   | 0.730 (0.353)   | 0.973 (0.534)  |
| 28 d           | 0.00365 (0.00323) | 0.145 (0.0900)  | 0.627 (0.285)   | 0.910 (0.475)  |
| 42 d           | 0.000675 (0.000392) | 0.121 (0.0455)  | 0.475 (0.198)   | 0.802 (0.364)  |
| R1 Pond 24 h   | 0.337 (0.393)     | 0.392 (0.456)   | 1.095 (0.626)   | 1.101 (0.634)  |
| 2 d            | 0.252 (0.293)     | 0.350 (0.398)   | 1.068 (0.607)   | 1.098 (0.631)  |
| 4 d            | 0.145 (0.166)     | 0.290 (0.311)   | 1.002 (0.555)   | 1.086 (0.622)  |
| 7 d            | 0.0659 (0.0743)   | 0.227 (0.227)   | 0.900 (0.477)   | 1.058 (0.600)  |
| 14 d           | 0.0135 (0.0140)   | 0.161 (0.131)   | 0.730 (0.353)   | 0.973 (0.534)  |
| 21 d           | 0.00365 (0.00323) | 0.145 (0.0900)  | 0.627 (0.285)   | 0.910 (0.475)  |
| 28 d           | 0.00149 (0.00107) | 0.120 (0.0679)  | 0.560 (0.245)   | 0.881 (0.428)  |
| 42 d           | 0.000675 (0.000392) | 0.121 (0.0455)  | 0.475 (0.198)   | 0.802 (0.364)  |
| R1 Pond 4 d    | 0.145 (0.166)     | 0.290 (0.311)   | 1.002 (0.555)   | 1.086 (0.622)  |
| 7 d            | 0.0659 (0.0743)   | 0.227 (0.227)   | 0.900 (0.477)   | 1.058 (0.600)  |
| 14 d           | 0.0135 (0.0140)   | 0.161 (0.131)   | 0.730 (0.353)   | 0.973 (0.534)  |
| 21 d           | 0.00365 (0.00323) | 0.145 (0.0900)  | 0.627 (0.285)   | 0.910 (0.475)  |
| 28 d           | 0.00149 (0.00107) | 0.120 (0.0679)  | 0.560 (0.245)   | 0.881 (0.428)  |
| 42 d           | 0.000675 (0.000392) | 0.121 (0.0455)  | 0.475 (0.198)   | 0.802 (0.364)  |
| R1 Stream 0 h  | 5.672 (7.094)     |                | 1.034 (1.006)   |                |
| 24 h           | 0.00174 (0.00207) | 1.123 (1.405)   | 0.882 (0.826)   | 0.975 (0.936)  |
| 2 d            | 0.00126 (0.00148) | 0.562 (0.703)   | 0.765 (0.688)   | 0.909 (0.857)  |
| 4 d            | 0.000710 (0.000808) | 0.282 (0.352)  | 0.613 (0.513)   | 0.804 (0.734)  |
| 7 d            | 0.000353 (0.000379) | 0.161 (0.201)  | 0.491 (0.379)   | 0.698 (0.612)  |
| 14 d           | 0.000140 (0.000132) | 0.133 (0.102)  | 0.381 (0.269)   | 0.567 (0.467)  |
| 21 d           | 0.000077 (0.000067) | 0.0894 (0.0681) | 0.322 (0.216)   | 0.495 (0.392)  |
| 28 d           | 0.000051 (0.000511) | 0.0675 (0.0511) | 0.286 (0.186)   | 0.461 (0.344)  |
| 42 d           | 0.000029 (0.000341) | 0.0622 (0.0341) | 0.240 (0.151)   | 0.413 (0.285)  |
| R2 Stream 0 h  | 7.600 (9.505)     |                | 0.814 (0.727)   |                |
| 24 h           | 0.000876 (0.00102) | 0.809 (1.011)   | 0.699 (0.594)   | 0.765 (0.670)  |
| 2 d            | 0.000642 (0.000733) | 0.405 (0.506)  | 0.612 (0.494)   | 0.715 (0.612)  |
| 4 d            | 0.000369 (0.000403) | 0.203 (0.253)  | 0.499 (0.368)   | 0.637 (0.523)  |
|       | R3 Stream | R4 Stream |
|-------|-----------|-----------|
|       | 0 h       | 0 h       |
| 7 d   | 0.000189 (0.000191) | 5.671 (7.093) |
|       | 0.116 (0.145) | 1.026 (1.012) |
|       | 0.407 (0.271) | 0.966 (0.942) |
|       | 0.558 (0.436) | 0.966 (0.942) |
| 14 d  | 0.000071 (0.000060) | 0.01176 (0.00208) |
|       | 0.116 (0.0725) | 1.125 (1.406) |
|       | 0.312 (0.183) | 0.872 (0.831) |
|       | 0.456 (0.328) | 0.966 (0.942) |
| 21 d  | 0.000046 (0.000036) | 0.00128 (0.00149) |
|       | 0.0773 (0.0484) | 0.563 (0.704) |
|       | 0.273 (0.154) | 0.753 (0.692) |
|       | 0.431 (0.274) | 0.899 (0.862) |
| 28 d  | 0.000029 (0.000020) | 0.000425 (0.000478) |
|       | 0.0580 (0.0363) | 0.284 (0.354) |
|       | 0.242 (0.132) | 0.599 (0.517) |
|       | 0.409 (0.241) | 0.793 (0.739) |
| 42 d  | 0.000017 (0.000011) | 0.000212 (0.000225) |
|       | 0.0540 (0.0242) | 0.163 (0.203) |
|       | 0.204 (0.107) | 0.475 (0.382) |
|       | 0.362 (0.200) | 0.685 (0.616) |
|       | 0.000080 (0.000048) | 0.000495 (0.000082) |
|       | 0.106 (0.0544) | 0.162 (0.103) |
|       | 0.435 (2.44) | 0.687 (0.269) |
|       | 0.566 (0.364) | 0.610 (0.469) |
|       | 0.000054 (0.000031) | 0.0459 (0.0459) |
|       | 0.0726 (0.0363) | 0.108 (0.0705) |
|       | 0.345 (0.195) | 0.530 (2.90) |
|       | 0.507 (0.315) | 0.593 (0.395) |
FOCUS Step 4- Percentage mitigation required to meet calculated RACs. Shaded cells require more than 95% so indicate the situations where low risk was not demonstrated, when complying with FOCUS 2007 Landscape and mitigation guidance. No FOCUS scenario indicated low risk. Only half scenarios (ponds) have low risk indicated.

| FOCUS Step 3 Scenario | Max PEC<sub>sw</sub> (µg/L) | Mitigation Required for First Tier RAC (0.052 µg/L) (%) | Mitigation Required for Higher Tier RAC (0.128 µg/L) (%) |
|-----------------------|-----------------------------|-------------------------------------------------------|-------------------------------------------------------|
|                       | Multiple Applications        | Single Applications                                    |                                                       |
| D3-Ditch              | 7.041                       | 8.729                                                 |                                                       |
| D4-Pond               | 0.475                       | 0.53                                                  |                                                       |
| D4-Stream             | 7.354                       | 9.197                                                 |                                                       |
| D5-Pond               | 0.447                       | 0.53                                                  |                                                       |
| D5-Stream             | 7.752                       | 9.695                                                 |                                                       |
| R1-Pond               | 0.453                       | 0.53                                                  |                                                       |
| R1-Stream             | 5.672                       | 7.094                                                 |                                                       |
| R2-Stream             | 7.6                         | 9.505                                                 |                                                       |
| R3-Stream             | 8.009                       | 10.016                                                |                                                       |
| R4-Stream             | 5.671                       | 7.093                                                 |                                                       |

Crop and growth stage: Apples BBCH 31-89
Number of applications: 3
Interval (d): 10
Application rate(s): 75 g a.s./ha
Application window: Late spray drift / Mar-May
Crop Interception: Full canopy (70%)

| FOCUS STEP 1 Scenario | Day after overall maximum | PEC<sub>sw</sub> (µg/L) | PEC<sub>sed</sub> (µg/kg) |
|-----------------------|---------------------------|--------------------------|--------------------------|
|                       |                           | Actual | TWA         | Actual | TWA         |
| 0 h                   |                           | 10.1051 | 141.1961    |         |             |
| 24 h                  |                           | 4.7409  | 7.4230      | 108.4240 | 124.8101    |
| 2 d                   |                           | 3.1458  | 5.6560      | 71.9451  | 106.8757    |
| 4 d                   |                           | 1.3851  | 3.9012      | 31.6776  | 77.9824     |
| 7 d                   |                           | 0.4047  | 2.5708      | 9.2551   | 52.3713     |
| 14 d                  |                           | 0.0229  | 1.3519      | 0.5242   | 27.7062     |
| 21 d                  |                           | 0.0013  | 0.9038      | 0.0297   | 18.5282     |
| 28 d                  |                           | 0.0001  | 0.6779      | 0.0017   | 13.8986     |
| 42 d                  |                           | 0.0000  | 0.4520      | 0.0000   | 9.2658      |

| FOCUS STEP 2 Scenario | Day after overall maximum | PEC<sub>sw</sub> (µg/L) Multiple Applications (Single Application) | PEC<sub>sed</sub> (µg/kg) Multiple Applications (Single Application) |
|-----------------------|---------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
|                       |                           | Actual | TWA         | Actual | TWA         |
|                       |                           |         |             |         |             |
### FOCUS STEP 3

#### Scenario

**Water body** | **Day after overall maximum** | **PEC$_{SW}$ (µg/L)** | **PEC$_{SED}$ (µg/kg)**
--- | --- | --- | ---
**D3** | Ditch | | |
| | 0 h | 1.968 (2.756) | 1.964 (2.756) |
| | 24 h | 1.360 (1.902) | 1.640 (2.295) |
| | 2 d | 0.786 (1.096) | 1.359 (1.901) |
| | 4 d | 0.148 (0.199) | 0.878 (1.225) |
| | 7 d | 0.0342 (0.0417) | 0.532 (0.739) |
| | 14 d | 0.00576 (0.00601) | 0.497 (0.378) |
| | 21 d | 0.0117 (0.0211) | 0.345 (0.253) |
| | 28 d | 0.00347 (0.00125) | 0.330 (0.190) |
| | 42 d | 0.00123 (0.000615) | 0.224 (0.127) |

**D4** | Pond | | |
| | 0 h | 0.116 (0.123) | 0.116 (0.123) |
| | 24 h | 0.103 (0.108) | 0.109 (0.115) |
| | 2 d | 0.0917 (0.0959) | 0.103 (0.108) |
|    | Stream | D4       | 0 h       | 4.0743 (0.0767) | 0.0927 (0.0971) | 0.411 (0.243) | 0.425 (0.251) |
|----|--------|----------|-----------|----------------|----------------|---------------|---------------|
| 4 d| 0.0743 (0.0767) | 0.0927 (0.0971) | 0.411 (0.243) | 0.425 (0.251) |
| 7 d| 0.0527 (0.0536) | 0.0802 (0.0833) | 0.391 (0.230) | 0.421 (0.249) |
| 14 d| 0.0250 (0.0246) | 0.0598 (0.0601) | 0.344 (0.199) | 0.407 (0.240) |
| 21 d| 0.0129 (0.0123) | 0.0612 (0.0460) | 0.304 (0.173) | 0.390 (0.228) |
| 28 d| 0.00712 (0.00654) | 0.0533 (0.0368) | 0.274 (0.153) | 0.372 (0.217) |
| 42 d| 0.00293 (0.00246) | 0.0433 (0.0259) | 0.231 (0.126) | 0.343 (0.195) |
| Pond | 0.101 (0.123) | 0.265 (0.175) | 0.263 (0.173) | 0.264 (0.174) |
| D5 | 24 h | 0.0797 (0.0971) | 0.0894 (0.109) | 0.263 (0.173) | 0.264 (0.174) |
| 2 d | 0.0636 (0.0770) | 0.0803 (0.0979) | 0.258 (0.169) | 0.264 (0.174) |
| 4 d | 0.0412 (0.0493) | 0.0660 (0.0800) | 0.244 (0.159) | 0.262 (0.172) |
| 7 d | 0.0223 (0.0262) | 0.0510 (0.0614) | 0.222 (0.141) | 0.256 (0.168) |
| 14 d | 0.00617 (0.00683) | 0.0449 (0.0379) | 0.179 (0.109) | 0.238 (0.154) |
| 21 d | 0.00213 (0.00216) | 0.0373 (0.0266) | 0.153 (0.0901) | 0.220 (0.140) |
| 28 d | 0.00131 (0.00120) | 0.0365 (0.0203) | 0.136 (0.0785) | 0.210 (0.128) |
|                |        |        |        |        |
|----------------|--------|--------|--------|--------|
|                | 42 d   | 0.000605 (0.00470) | 0.0266 (0.0138) | 0.114 (0.0641) | 0.191 (0.111) |
| **D5 Stream**  | 0 h    | 2.126 (2.979) |        |        |        |
|                | 24 h   | 0.0110 (0.0148) | 0.779 (1.091) | 0.726 (0.628) | 0.795 (0.712) |
|                | 2 d    | 0.00278 (0.00341) | 0.392 (0.549) | 0.644 (0.528) | 0.753 (0.660) |
|                | 4 d    | 0.00160 (0.00186) | 0.197 (0.276) | 0.534 (0.399) | 0.681 (0.572) |
|                | 7 d    | 0.000827 (0.000872) | 0.113 (0.158) | 0.441 (0.298) | 0.603 (0.481) |
|                | 14 d   | 0.000313 (0.000268) | 0.112 (0.0793) | 0.341 (0.204) | 0.509 (0.365) |
|                | 21 d   | 0.000180 (0.000135) | 0.111 (0.0529) | 0.291 (0.165) | 0.489 (0.305) |
|                | 28 d   | 0.000125 (0.000086) | 0.0839 (0.0397) | 0.259 (0.142) | 0.452 (0.268) |
|                | 42 d   | 0.000073 (0.000046) | 0.0560 (0.0265) | 0.218 (0.115) | 0.401 (0.221) |
| **R1 Pond**    | 0 h    | 0.107 (0.123) |        | 0.339 (0.204) |        |
|                | 24 h   | 0.0891 (0.102) | 0.0974 (0.112) | 0.338 (0.203) | 0.338 (0.204) |
|                | 2 d    | 0.0750 (0.0855) | 0.0895 (0.103) | 0.336 (0.200) | 0.338 (0.203) |
|                | 4 d    | 0.0537 (0.0607) | 0.0766 (0.0875) | 0.329 (0.191) | 0.337 (0.202) |
|                | 7 d    | 0.0335 (0.0374) | 0.0648 (0.0706) | 0.316 (0.177) | 0.335 (0.199) |
|                | 14 d   | 0.0139 (0.0150) | 0.0523 (0.0470) | 0.283 (0.152) | 0.327 (0.188) |
|                | 21 d   | 0.00773 (0.00812) | 0.0458 (0.0351) | 0.253 (0.133) | 0.315 (0.177) |
|                | 28 d   | 0.0663 (0.00457) | 0.0377 (0.0279) | 0.229 (0.117) | 0.303 (0.167) |
|                | 42 d   | 0.0167 (0.00167) | 0.0372 (0.0195) | 0.195 (0.0960) | 0.279 (0.150) |
| **R1 Stream**  | 0 h    | 1.507 (2.112) |        | 0.309 (0.318) |        |
|                | 24 h   | 0.000524 (0.000672) | 0.319 (0.444) | 0.268 (0.262) | 0.294 (0.297) |
|                | 2 d    | 0.000387 (0.000488) | 0.160 (0.222) | 0.236 (0.220) | 0.276 (0.273) |
|                | 4 d    | 0.000225 (0.000272) | 0.0800 (0.111) | 0.195 (0.166) | 0.247 (0.235) |
|                | 7 d    | 0.000115 (0.000130) | 0.0458 (0.0637) | 0.160 (0.123) | 0.218 (0.197) |
### Table 1: Pesticide Risk Assessment Results

|   |   |   |   |   |
|---|---|---|---|---|
| 14 d | 0.000041 (0.000041) | 0.0454 (0.0319) | 0.125 (0.0836) | 0.180 (0.149) |
| 21 d | 0.000023 (0.000021) | 0.0303 (0.0213) | 0.109 (0.0674) | 0.159 (0.125) |
| 28 d | 0.000276 (0.000013) | 0.228 (0.0160) | 0.0980 (0.0581) | 0.145 (0.109) |
| 42 d | 0.000011 (0.000003) | 0.228 (0.0106) | 0.0841 (0.0471) | 0.147 (0.0902) |

### Table 2: Stream Concentrations

|   |   |   |   |   |
|---|---|---|---|---|
| R2 Stream 0 h | 2.02 (2.831) | | 0.253 (0.234) |
| 24 h | 0.000252 (0.000313) | 0.220 (0.309) | 0.221 (0.195) | 0.239 (0.217) |
| 2 d | 0.000097 (0.000118) | 0.110 (0.154) | 0.197 (0.165) | 0.225 (0.200) |
| 4 d | 0.000058 (0.000066) | 0.0560 (0.0772) | 0.164 (0.127) | 0.203 (0.174) |
| 7 d | 0.000031 (0.000032) | 0.0320 (0.0442) | 0.136 (0.0961) | 0.181 (0.147) |
| 14 d | 0.000012 (0.000010) | 0.0318 (0.0223) | 0.106 (0.0679) | 0.153 (0.113) |
| 21 d | 0.000004 (0.000003) | 0.0212 (0.0149) | 0.0918 (0.0562) | 0.147 (0.0962) |
| 28 d | 0.000005 (0.000004) | 0.0238 (0.0112) | 0.0823 (0.0494) | 0.137 (0.0854) |
| 42 d | 0.000003 (0.000002) | 0.0159 (0.00745) | 0.0702 (0.0413) | 0.120 (0.0719) |

### Table 3: Stream Concentrations

|   |   |   |   |   |
|---|---|---|---|---|
| R3 Stream 0 h | 2.125 (2.977) | | 0.894 (0.847) |
| 24 h | 0.00736 (0.0104) | 0.720 (1.008) | 0.928 (0.818) | 0.963 (0.839) |
| 2 d | 0.00209 (0.00295) | 0.361 (0.506) | 0.882 (0.792) | 0.938 (0.828) |
| 4 d | 0.00115 (0.00161) | 0.181 (0.254) | 0.819 (0.753) | 0.897 (0.809) |
| 7 d | 0.000273 (0.000380) | 0.104 (0.146) | 0.762 (0.713) | 0.853 (0.782) |
| 14 d | 0.000469 (0.000118) | 0.0794 (0.0730) | 0.690 (0.655) | 0.826 (0.737) |
| 21 d | 0.000462 (0.000402) | 0.0630 (0.0588) | 0.648 (0.617) | 0.808 (0.705) |
| 28 d | 0.000908 (0.000170) | 0.0609 (0.0442) | 0.616 (0.589) | 0.780 (0.681) |
| 42 d | 0.000135 (0.000089) | 0.0407 (0.0295) | 0.568 (0.544) | 0.732 (0.644) |

### Table 4: Stream Concentrations

|   |   |   |   |   |
|---|---|---|---|---|
| R4 Stream 0 h | 1.507 (2.112) | | 0.371 (0.381) |
### FOCUS Step 3 - Scenario

| Scenario     | Max PEC<sub>sw</sub> (µg/L) | Mitigation Required for First Tier RAC (0.052 µg/L) (%) | Mitigation Required for Higher Tier RAC (0.128 µg/L) (%) |
|--------------|-----------------------------|--------------------------------------------------------|--------------------------------------------------------|
| Multiple     | Single                      | Applications                                            | Applications                                            |
| D3-Ditch     | 1.968                       | 2.756                                                  | 98.1                                                   | 95.4 |
| D4-Pond      | 0.116                       | 0.123                                                  | 57.7                                                   | N/A  |
| D4-Stream    | 1.929                       | 2.694                                                  | 98.1                                                   | 95.2 |
| D5-Pond      | 0.101                       | 0.123                                                  | 57.7                                                   | N/A  |
| D5-Stream    | 2.126                       | 2.979                                                  | 98.3                                                   | 95.7 |
| R1-Pond      | 0.107                       | 0.123                                                  | 57.7                                                   | N/A  |
| R1-Stream    | 1.507                       | 2.112                                                  | 97.5                                                   | 93.9 |
| R2-Stream    | 2.02                        | 2.831                                                  | 98.2                                                   | 95.5 |
| R3-Stream    | 2.125                       | 2.977                                                  | 98.3                                                   | 95.7 |
| R4-Stream    | 1.507                       | 2.112                                                  | 97.5                                                   | 93.9 |

### FOCUS Step 4 - Percentage mitigation required to meet calculated RACs. Shaded cells require more than 95% mitigation so indicate the situations where low risk was not demonstrated, when complying with FOCUS 2007 Landscape and mitigation guidance.

Crop and growth stage: Apples BBCH 61-85
Number of applications: 3
Interval (d): 10
Application rate(s): 112.5 g a.s./ha
Application window: Late spray drift
Crop Interception: Full canopy (70%)

| Time (d) | Max PEC<sub>sw</sub> (µg/L) | Mitigation Required for First Tier RAC (0.052 µg/L) (%) | Mitigation Required for Higher Tier RAC (0.128 µg/L) (%) |
|----------|-------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| 24 h     | 0.000507 (0.000678)           | 0.316 (0.443)                                           | 0.329 (0.325)                                           |
|          |                               | 0.355 (0.360)                                           |                                                        |
| 2 d      | 0.000376 (0.000495)           | 0.158 (0.222)                                           | 0.297 (0.283)                                           |
|          |                               | 0.337 (0.336)                                           |                                                        |
| 4 d      | 0.000220 (0.000279)           | 0.0793 (0.111)                                          | 0.254 (0.228)                                           |
|          |                               | 0.308 (0.298)                                           |                                                        |
| 7 d      | 0.000116 (0.000137)           | 0.0510 (0.0636)                                         | 0.218 (0.184)                                           |
|          |                               | 0.278 (0.259)                                           |                                                        |
| 14 d     | 0.000046 (0.000047)           | 0.0276 (0.0318)                                         | 0.180 (0.142)                                           |
|          |                               | 0.238 (0.210)                                           |                                                        |
| 21 d     | 0.000028 (0.000026)           | 0.0314 (0.0212)                                         | 0.161 (0.124)                                           |
|          |                               | 0.217 (0.184)                                           |                                                        |
| 28 d     | 0.000020 (0.000018)           | 0.0235 (0.0174)                                         | 0.149 (0.113)                                           |
|          |                               | 0.217 (0.168)                                           |                                                        |
| 42 d     | 0.000005 (0.000004)           | 0.0233 (0.0125)                                         | 0.132 (0.0990)                                          |
|          |                               | 0.202 (0.147)                                           |                                                        |
| FOCUS STEP 1 Scenario | Day after overall maximum | PEC<sub>SW</sub> (µg/L) | PEC<sub>SED</sub> (µg/kg) |
|-----------------------|--------------------------|--------------------------|--------------------------|
|                       | Actual | TWA | Actual | TWA |
| 0 h                   | 15.1577 | 211.7941 |
| 24 h                  | 7.1113 | 11.1345 | 162.6361 | 187.2151 |
| 2 d                   | 4.7187 | 8.4840 | 107.9177 | 160.3135 |
| 4 d                   | 2.0777 | 5.8518 | 47.5165 | 116.9736 |
| 7 d                   | 0.6070 | 3.8561 | 13.8826 | 78.5570 |
| 14 d                  | 0.0344 | 2.0278 | 0.7863 | 41.5593 |
| 21 d                  | 0.0019 | 1.3556 | 0.0445 | 27.7923 |
| 28 d                  | 0.0000 | 1.0169 | 0.0025 | 20.8479 |
| 42 d                  | 0.0000 | 0.6779 | 0.0000 | 13.8987 |

| FOCUS STEP 2 Scenario | Day after overall maximum | PEC<sub>SW</sub> (µg/L) Multiple Applications (Single Application) | PEC<sub>SED</sub> (µg/kg) Multiple Applications (Single Application) |
|-----------------------|--------------------------|--------------------------|--------------------------|
|                       | Actual | TWA | Actual | TWA |
| Northern EU 0 h       | 4.1520 (5.8969) | 10.5480 (14.7329) |
| 24 h                  | 1.3796 (1.9485) | 2.7658 (3.9227) | 8.7175 (12.300) | 9.6328 (13.4815) |
| 2 d                   | 0.6863 (0.9657) | 1.8994 (2.6899) | 6.0707 (8.5240) | 8.5134 (11.9292) |
| 4 d                   | 0.2760 (0.3854) | 1.1743 (1.6604) | 3.1335 (4.3673) | 6.4575 (9.0384) |
| 7 d                   | 0.0603 (0.0841) | 0.7276 (1.0277) | 0.9155 (1.2760) | 4.4733 (6.2566) |
| 14 d                  | 0.0034 (0.0048) | 0.3739 (0.5279) | 0.0519 (0.0723) | 2.3892 (3.3408) |
| 21 d                  | 0.0002 (0.0003) | 0.2496 (0.3524) | 0.0029 (0.0041) | 1.5985 (2.2353) |
| 28 d                  | 0.0000 (0.0000) | 0.1872 (0.2644) | 0.0002 (0.0002) | 1.1991 (1.6768) |
| 42 d                  | 0.0000 (0.0000) | 0.1248 (0.1762) | 0.0000 (0.0000) | 0.7994 (1.1179) |
| Southern EU 0 h       | 4.1520 (5.8969) | 10.5480 (14.7329) |
| 24 h                  | 1.3796 (1.9485) | 2.7658 (3.9227) | 8.7175 (12.300) | 9.6328 (13.4815) |
| 2 d                   | 0.6863 (0.9657) | 1.8994 (2.6899) | 6.0707 (8.5240) | 8.5134 (11.9292) |
| 4 d                   | 0.2814 (0.3909) | 1.1750 (1.6611) | 3.2165 (4.4503) | 6.4991 (9.0800) |
| 7 d                   | 0.0619 (0.0857) | 0.7294 (1.0295) | 0.9397 (1.3002) | 4.5179 (6.3011) |
| 14 d                  | 0.0035 (0.0049) | 0.3750 (0.5290) | 0.0532 (0.0736) | 2.4155 (3.3672) |
| 21 d                  | 0.0002 (0.0003) | 0.2504 (0.3532) | 0.0030 (0.0042) | 1.6162 (2.2530) |
| 28 d                  | 0.0000 (0.0000) | 0.1878 (0.2649) | 0.0002 (0.0002) | 1.2124 (1.6901) |
| 42 d                  | 0.0000 (0.0000) | 0.1252 (0.1766) | 0.0000 (0.0000) | 0.8083 (1.1267) |

| FOCUS STEP 3 Scenario | Water body | Day after overall maximum | PEC<sub>SW</sub> (µg/L) | PEC<sub>SED</sub> (µg/kg) |
|-----------------------|------------|--------------------------|--------------------------|--------------------------|
|                       | Actual | TWA | Actual | TWA |

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### D3 Ditch

| Time | 0 h | 2.5952 (4.134) | 3.675 (3.644) |
|------|-----|----------------|---------------|
| 24 h | 2.040 (2.853) | 2.459 (3.442) | 3.516 (3.447) | 3.657 (3.621) |
| 2 d  | 1.180 (1.645) | 2.039 (2.852) | 3.232 (3.103) | 3.606 (3.557) |
| 4 d  | 0.222 (0.299) | 1.318 (1.838) | 2.728 (2.511) | 3.441 (3.352) |
| 7 d  | 0.512 (0.0625) | 0.798 (1.109) | 2.249 (1.971) | 3.155 (3.008) |
| 14 d | 0.00855 (0.00893) | 0.745 (0.567) | 2.764 (1.392) | 2.639 (2.416) |

### D4 Pond

| Time | 0 h | 0.174 (0.185) | 0.636 (0.376) |
|------|-----|----------------|---------------|
| 24 h | 0.154 (0.162) | 0.164 (0.173) | 0.634 (0.375) | 0.636 (0.376) |
| 2 d  | 0.138 (0.144) | 0.155 (0.163) | 0.629 (0.372) | 0.635 (0.376) |
| 4 d  | 0.111 (0.115) | 0.139 (0.146) | 0.613 (0.362) | 0.633 (0.374) |
| 7 d  | 0.0791 (0.0806) | 0.120 (0.125) | 0.583 (0.343) | 0.627 (0.371) |
| 14 d | 0.0375 (0.0370) | 0.0897 (0.0903) | 0.512 (0.297) | 0.606 (0.357) |
| 21 d | 0.0193 (0.0185) | 0.0919 (0.0691) | 0.453 (0.257) | 0.581 (0.340) |
| 28 d | 0.0107 (0.00981) | 0.0801 (0.0552) | 0.407 (0.228) | 0.554 (0.323) |
| 42 d | 0.00439 (0.00368) | 0.0560 (0.0388) | 0.344 (0.188) | 0.510 (0.291) |

### D4 Stream

| Time | 0 h | 2.894 (4.055) | 0.454 (0.478) |
|------|-----|----------------|---------------|
| 24 h | 0.000732 (0.00104) | 0.477 (0.668) | 0.394 (0.395) | 0.430 (0.445) |
| 2 d  | 0.000540 (0.000762) | 0.239 (0.334) | 0.348 (0.330) | 0.404 (0.408) |
| 4 d  | 0.000309 (0.000433) | 0.120 (0.167) | 0.288 (0.247) | 0.363 (0.350) |
| 7 d  | 0.000154 (0.000214) | 0.0684 (0.958) | 0.239 (0.183) | 0.321 (0.293) |
| 14 d | 0.000051 (0.000071) | 0.0625 (0.0480) | 0.186 (0.124) | 0.266 (0.222) |
| 21 d | 0.000022 (0.000030) | 0.0419 (0.0320) | 0.10 (0.100) | 0.254 (0.185) |
| 28 d | 0.000151 (0.000017) | 0.0330 (0.0240) | 0.143 (0.0862) | 0.240 (0.162) |
|       |       |       |       |
|-------|-------|-------|-------|
| 42 d  | 0.00325 (0.00325) | 0.0324 (0.0161) | 0.122 (0.0722) | 0.212 (0.134) |
| D5    | Pond  |       |       |
| 0 h   | 0.151 (0.185)     |       | 0.394 (0.260) |
| 24 h  | 0.120 (0.146)     | 0.134 (0.164) | 0.391 (0.258) | 0.394 (0.260) |
| 2 d   | 0.0955 (0.116)    | 0.121 (0.147) | 0.384 (0.252) | 0.393 (0.259) |
| 4 d   | 0.0619 (0.0741)   | 0.0991 (0.120) | 0.364 (0.237) | 0.390 (0.257) |
| 7 d   | 0.0335 (0.0393)   | 0.0765 (0.0922) | 0.330 (0.210) | 0.382 (0.251) |
| 14 d  | 0.00925 (0.0103)  | 0.0673 (0.0568) | 0.264 (0.162) | 0.355 (0.230) |
| 21 d  | 0.00318 (0.00323) | 0.0560 (0.0399) | 0.227 (0.134) | 0.328 (0.209) |
| 28 d  | 0.00196 (0.00180) | 0.0548 (0.0305) | 0.202 (0.117) | 0.313 (0.191) |
| 42 d  | 0.0009901 (0.000700) | 0.0399 (0.0207) | 0.170 (0.0953) | 0.284 (0.165) |
| D5    | Stream |       |       |
| 0 h   | 3.190 (4.468)     |       | 1.229 (1.119) |
| 24 h  | 0.0165 (0.223)    | 1.169 (1.637) | 1.082 (0.938) | 1.187 (1.065) |
| 2 d   | 0.00419 (0.0516)  | 0.588 (0.823) | 0.958 (0.786) | 1.124 (0.987) |
| 4 d   | 0.00240 (0.00279) | 0.296 (0.413) | 0.794 (0.593) | 1.014 (0.854) |
| 7 d   | 0.00123 (0.00130) | 0.170 (0.237) | 0.655 (0.443) | 0.897 (0.716) |
| 14 d  | 0.000465 (0.000398) | 0.168 (0.119) | 0.506 (0.303) | 0.758 (0.544) |
| 21 d  | 0.000268 (0.000201) | 0.167 (0.0793) | 0.433 (0.245) | 0.727 (0.454) |
| 28 d  | 0.000186 (0.000128) | 0.126 (0.0596) | 0.385 (0.211) | 0.673 (0.398) |
| 42 d  | 0.000108 (0.000068) | 0.0841 (0.0397) | 0.325 (0.172) | 0.597 (0.329) |
| R1    | Pond  |       |       |
| 0 h   | 0.160 (0.185)     |       | 0.504 (0.304) |
| 24 h  | 0.134 (0.154)     | 0.146 (0.168) | 0.503 (0.302) | 0.504 (0.304) |
| 2 d   | 0.113 (0.128)     | 0.134 (0.154) | 0.500 (0.298) | 0.504 (0.303) |
| 4 d   | 0.0807 (0.0912)   | 0.115 (0.131) | 0.491 (0.285) | 0.503 (0.301) |
| 7 d   | 0.0503 (0.0561)   | 0.0972 (0.106) | 0.471 (0.264) | 0.499 (0.296) |
| 14 d  | 0.0208 (0.0225)   | 0.0784 (0.0706) | 0.422 (0.227) | 0.486 (0.280) |
| Time  | R1 Stream | 0 h | 24 h | 2 d | 4 d | 7 d | 14 d | 21d | 28 d | 42 d |
|-------|-----------|-----|------|-----|-----|-----|------|-----|------|------|
| 21 d  | 0.0116 (0.0122) | 0.0687 (0.0527) | 0.377 (0.198) | 0469 (0.264) |
| 28 d  | 0.0996 (0.00686) | 0.0566 (0.0418) | 0.341 (0.175) | 0.450 (0.249) |
| 42 d  | 0.0250 (0.00250) | 0.0558 (0.0293) | 0.290 (0.143) | 0.415 (0.223) |

| Time  | R2 Stream | 0 h | 24 h | 2 d | 4 d | 7 d | 14 d | 21d | 28 d | 42 d |
|-------|-----------|-----|------|-----|-----|-----|------|-----|------|------|
| 21 d  | 3.261 (3.168) | 0.462 (0.476) |
| 24 h  | 0.000794 (0.00102) | 0.478 (0.666) | 0.400 (0.392) | 0.439 (0.444) |
| 2 d   | 0.000584 (0.000737) | 0.240 (0.333) | 0.352 (0.328) | 0.412 (0.408) |
| 4 d   | 0.000336 (0.000408) | 0.120 (0.167) | 0.289 (0.246) | 0.369 (0.351) |
| 7 d   | 0.000171 (0.000194) | 0.0687 (0.0955) | 0.238 (0.183) | 0.325 (0.294) |
| 14 d  | 0.000062 (0.000061) | 0.0682 (0.0478) | 0.186 (0.124) | 0.268 (0.222) |
| 21d   | 0.000034 (0.000031) | 0.0455 (0.0319) | 0.162 (0.100) | 0.237 (0.185) |
| 28 d  | 0.000415 (0.000020) | 0.0342 (0.0239) | 0.146 (0.0864) | 0.216 (0.162) |
| 42 d  | 0.000017 (0.000004) | 0.0342 (0.0160) | 0.125 (0.0701) | 0.218 (0.134) |

| Time  | R3 Stream | 0 h | 24 h | 2 d | 4 d | 7 d | 14 d | 21d | 28 d | 42 d |
|-------|-----------|-----|------|-----|-----|-----|------|-----|------|------|
| 21 d  | 3.187 (4.465) | 1.466 (1.263) |
| 24 h  | 0.111 (0.0156) | 1.079 (1.512) | 1.381 (1.218) | 1.434 (1.249) |
| 2 d   | 0.00316 (0.00445) | 0.542 (0.760) | 1.312 (1.179) | 1.396 (1.234) |
| Scenario   | Time | Max PEC<sub>sw</sub> (µg/L) | Mitigation Required for First Tier RAC (0.052 µg/L) (%) | Mitigation Required for Higher Tier RAC (0.128 µg/L) (%) |
|------------|------|-----------------------------|-------------------------------------------------------|-------------------------------------------------------|
| Multiple Applications | Single Applications | | | |
| D3-Ditch   | 4 d  | 0.00172 (0.00241) | 0.272 (0.381) | 1.218 (1.120) | 1.335 (1.205) |
|            | 7 d  | 0.000406 (0.000565) | 0.156 (0.219) | 1.132 (1.060) | 1.268 (1.165) |
|            | 14 d | 0.000703 (0.000175) | 0.119 (0.110) | 1.026 (0.974) | 1.229 (1.097) |
|            | 21 d | 0.000694 (0.000606) | 0.0948 (0.0884) | 0.962 (0.917) | 1.202 (1.049) |
|            | 28 d | 0.00137 (0.000255) | 0.0916 (0.0664) | 0.914 (0.874) | 1.160 (1.013) |
|            | 42 d | 0.000201 (0.000134) | 0.0612 (0.0443) | 0.843 (0.808) | 1.088 (0.957) |
| R4 Stream  | 0 h  | 2.261 (3.167) | 0.555 (0.571) | | |
|            | 24 h | 0.000769 (0.00103) | 0.475 (0.665) | 0.491 (0.486) | 0.531 (0.539) |
|            | 2 d  | 0.000567 (0.000747) | 0.238 (0.333) | 0.443 (0.422) | 0.504 (0.503) |
|            | 4 d  | 0.000330 (0.000418) | 0.119 (0.167) | 0.378 (0.339) | 0.460 (0.445) |
|            | 7 d  | 0.000172 (0.000204) | 0.0767 (0.0954) | 0.325 (0.274) | 0.415 (0.387) |
|            | 14 d | 0.000068 (0.000069) | 0.0416 (0.0478) | 0.268 (0.211) | 0.355 (0.313) |
|            | 21 d | 0.000041 (0.000038) | 0.0471 (0.0319) | 0.240 (0.185) | 0.323 (0.275) |
|            | 28 d | 0.000030 (0.000026) | 0.0354 (0.0261) | 0.222 (0.168) | 0.324 (0.250) |
|            | 42 d | 0.000007 (0.000006) | 0.0350 (0.0188) | 0.196 (0.147) | 0.301 (0.219) |

FOCUS Step 4- Percentage mitigation required to meet calculated RACs. Shaded cells require more than 95% mitigation, so indicate the situations where low risk was not demonstrated, when complying with FOCUS 2007 Landscape and mitigation guidance. No FOCUS scenario indicated low risk. Only half scenarios (ponds) have low risk indicated.
Peer review of the pesticide risk assessment of the active substance trifloxystrobin

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### FOCUS STEP 1

| Scenario | Day after overall maximum | PEC<sub>SW</sub> (µg/L) | PEC<sub>SED</sub> (µg/kg) |
|----------|----------------------------|------------------------|------------------------|
|          | Actual                     | TWA                    | Actual                 | TWA                  |
| 0 h      | 13.6348                    | 235.3268               | 202.0073               |
| 24 h     | 7.3759                     | 10.5053                | 118.6877               | 170.1917             |
| 2 d      | 4.8943                     | 8.2780                 | 49.2854                | 123.2827             |
| 4 d      | 2.1550                     | 5.8087                 | 98.8                   | 97.0                 |
| 7 d      | 0.6296                     | 3.8506                 | 14.3992                | 82.5981              |
| 14 d     | 0.0357                     | 2.0287                 | 0.8156                 | 43.6647              |
| 21 d     | 0.0020                     | 1.3564                 | 0.0462                 | 29.1991              |
| 28 d     | 0.0001                     | 1.0175                 | 0.0026                 | 21.9031              |
| 42 d     | 0.0000                     | 0.6783                 | 0.0000                 | 14.6022              |

### FOCUS STEP 2

| Scenario | Day after overall maximum | PEC<sub>SW</sub>(µg/L) Multiple Applications (Single Application) | PEC<sub>SED</sub>(µg/kg) Multiple Applications (Single Application) |
|----------|----------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
|          | Actual                     | TWA                                                           | Actual                                                         | TWA                                                        |
| Northern EU | 0 h                         | 2.8901 (3.3450)                                         | 7.3422 (8.3527)                                             |
|           | 24 h                        | 0.9603 (1.1053)                                         | 6.0680 (6.9375)                                          | 6.7051 (7.6474)                                             |
|           | 2 d                         | 0.4777 (0.5478)                                         | 4.2257 (4.8352)                                          | 5.9260 (6.7669)                                             |
|           | 4 d                         | 0.2004 (0.2277)                                         | 2.3078 (2.6147)                                          | 4.5584 (5.1959)                                             |
|           | 7 d                         | 0.0444 (0.0503)                                         | 0.6743 (0.7639)                                          | 3.1817 (3.6228)                                             |
|           | 14 d                        | 0.0025 (0.0029)                                         | 0.0382 (0.0433)                                         | 1.7032 (1.9386)                                             |
|           | 21 d                        | 0.0001 (0.0002)                                         | 0.0022 (0.0025)                                         | 1.1397 (1.2972)                                             |
|           | 28 d                        | 0.0000 (0.0000)                                         | 0.0001 (0.0001)                                         | 0.8550 (0.9731)                                             |
|           | 42 d                        | 0.0000 (0.0000)                                         | 0.0000 (0.0000)                                         | 0.5700 (0.6488)                                             |
| Southern EU | 0 h                         | 2.8901 (3.3450)                                         | 7.3422 (8.3527)                                         |
| Water body | Day after overall maximum | PEC<sub>SW</sub> (µg/L) Multiple Applications (Single Application) | PEC<sub>SED</sub> (µg/kg) Multiple Applications (Single Application) |
|------------|---------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| **D6** Ditch | 0 h | 1.831 (2.135) | 2.234 (1.984) |
| | 24 h | 1.284 (1.495) | 2.136 (1.878) | 2.223 (1.972) |
| | 2 d | 0.808 (0.939) | 1.952 (1.680) | 2.192 (1.938) |
| | 4 d | 0.152 (0.174) | 1.606 (1.320) | 2.090 (1.827) |
| | 7 d | 0.00618 (0.00644) | 0.508 (0.590) | 1.303 (1.018) | 1.903 (1.628) |
| | 14 d | 0.00356 (0.00333) | 0.389 (0.297) | 0.991 (0.727) | 1.572 (1.291) |
| | 21 d | 0.00607 (0.00529) | 0.279 (0.200) | 0.849 (0.606) | 1.371 (1.096) |
| | 28 d | 0.00490 (0.00407) | 0.210 (0.151) | 0.757 (0.531) | 1.254 (0.971) |
| | 42 d | 0.00218 (0.00170) | 0.156 (0.102) | 0.632 (0.434) | 1.117 (0.813) |
| **R1** Pond | 0 h | 0.0713 (0.0762) | 0.178 (0.114) |
| | 24 h | 0.0575 (0.0612) | 0.0640 (0.0682) | 0.176 (0.114) | 0.178 (0.114) |
| | 2 d | 0.0467 (0.0494) | 0.0579 (0.0616) | 0.173 (0.111) | 0.177 (0.114) |
| | 4 d | 0.0313 (0.0328) | 0.0482 (0.0510) | 0.163 (0.105) | 0.176 (0.113) |
| | 7 d | 0.0178 (0.0183) | 0.0378 (0.0398) | 0.148 (0.0947) | 0.172 (0.111) |
| | 14 d | 0.00537 (0.00531) | 0.0315 (0.0251) | 0.123 (0.0743) | 0.159 (0.102) |
| | 21 d | 0.00193 (0.00180) | 0.0295 (0.0178) | 0.108 (0.0610) | 0.148 (0.0938) |
|   |   |   |   |   |
|---|---|---|---|---|
| 28 d | 0.0165 (0.000547) | 0.0240 (0.0136) | 0.0971 (0.0521) | 0.149 (0.0862) |
| 42 d | 0.000841 (0.000127) | 0.0213 (0.00918) | 0.0832 (0.0420) | 0.146 (0.0744) |
| R1 | Stream | 0 h | 1.326 (1.555) | 0.165 (0.184) |
|   |   | 24 h | 0.000242 (0.000285) | 0.217 (0.254) | 0.144 (0.152) | 0.156 (0.171) |
|   |   | 2 d | 0.000177 (0.000209) | 0.108 (0.127) | 0.128 (0.128) | 0.147 (0.157) |
|   |   | 4 d | 0.000100 (0.000118) | 0.0543 (0.0637) | 0.107 (0.0963) | 0.132 (0.135) |
|   |   | 7 d | 0.000035 (0.000041) | 0.0311 (0.0364) | 0.0885 (0.0713) | 0.117 (0.113) |
|   |   | 14 d | 0.000104 (0.00013) | 0.0269 (0.0182) | 0.0698 (0.0483) | 0.0978 (0.0860) |
|   |   | 21 d | 0.000023 (0.000007) | 0.0180 (0.0122) | 0.0633 (0.0388) | 0.0890 (0.0718) |
|   |   | 28 d | 0.000011 (0.000005) | 0.0136 (0.00919) | 0.0572 (0.0348) | 0.0851 (0.0631) |
|   |   | 42 d | 0.000050 (0.000004) | 0.0129 (0.00613) | 0.489 (0.0280) | 0.0837 (0.0525) |
| R2 | Stream | 0 h | 1.787 (2.097) | 0.176 (0.158) |
|   |   | 24 h | 0.000183 (0.000205) | 0.186 (0.218) | 0.152 (0.130) | 0.166 (0.146) |
|   |   | 2 d | 0.000136 (0.000105) | 0.0931 (0.109) | 0.133 (0.110) | 0.155 (0.134) |
|   |   | 4 d | 0.000041 (0.000085) | 0.0466 (0.0547) | 0.108 (0.0827) | 0.138 (0.116) |
|   |   | 7 d | 0.000015 (0.000041) | 0.0267 (0.0313) | 0.0875 (0.0613) | 0.121 (0.0969) |
|   |   | 14 d | 0.000008 (0.000013) | 0.133 (0.0156) | 0.0667 (0.0416) | 0.0984 (0.0735) |
|   |   | 21 d | 0.000006 (0.000007) | 0.161 (0.0104) | 0.0570 (0.0335) | 0.0861 (0.0614) |
|   |   | 28 d | 0.000003 (0.000004) | 0.120 (0.00783) | 0.0509 (0.0289) | 0.0817 (0.0538) |
|   |   | 42 d | 0.000003 (0.000002) | 0.00804 (0.0052) | 0.0433 (0.0236) | 0.0741 (0.0446) |
| R3 | Stream | 0 h | 1.876 (2.200) | 0.511 (0.459) |
|   |   | 24 h | 0.00270 (0.00299) | 0.552 (0.647) | 0.00443 (0.386) | 0.489 (0.435) |
|   |   | 2 d | 0.00146 (0.00156) | 0.277 (0.324) | 0.385 (0.325) | 0.458 (0.402) |
### FOCUS Step 4 - Percentage mitigation required to meet calculated RACs.

| FOCUS Step 3 Scenario | Max PEC<sub>sw</sub> (µg/L) | Mitigation Required for First Tier RAC (0.052 µg/L) (%) | Mitigation Required for Higher Tier RAC (0.128 µg/L) (%) |
|-----------------------|-----------------------------|--------------------------------------------------------|--------------------------------------------------------|
|                       | Multiple Applications | Single Applications |                          |                                                    |
| D6-Ditch              | 1.831                      | 2.135                  | 97.6                      | 94.0                                                  |
| R1-Pond               | 0.0713                     | 0.0762                 | 31.8                      | N/A                                                   |
| R1-Stream             | 1.326                      | 1.555                  | 96.7                      | 91.8                                                  |
| R2-Stream             | 1.787                      | 2.097                  | 97.5                      | 93.9                                                  |
| R3-Stream             | 1.876                      | 2.2                    | 97.6                      | 94.2                                                  |
| R4-Stream             | 1.336                      | 1.567                  | 96.7                      | 91.8                                                  |

FOCUS Step 3 - Scenario

| Multiple Applications | Single Applications |
|-----------------------|----------------------|
| Max PEC<sub>sw</sub> (µg/L) | Mitigation Required for First Tier RAC (0.052 µg/L) (%) | Mitigation Required for Higher Tier RAC (0.128 µg/L) (%) |
| 4 d | 0.000834 (0.000861) | 0.141 (0.165) | 0.310 (0.246) | 0.408 (0.348) |
| 7 d | 0.000421 (0.000409) | 0.0811 (0.0947) | 0.247 (0.184) | 0.355 (0.293) |
| 14 d | 0.000127 (0.000108) | 0.0802 (0.0475) | 0.183 (0.126) | 0.284 (0.223) |
| 21 d | 0.000070 (0.000055) | 0.0537 (0.0317) | 0.154 (0.102) | 0.261 (0.187) |
| 28 d | 0.000966 (0.000034) | 0.0403 (0.0238) | 0.363 (0.0881) | 0.243 (0.164) |
| 42 d | 0.000124 (0.000020) | 0.0381 (0.0159) | 0.193 (0.0715) | 0.244 (0.136) |
| R4 Stream | 0 h | 1.336 (1.567) | 0.235 (0.223) |
| 24 h | 0.000376 (0.000435) | 0.264 (0.310) | 0.203 (0.185) | 0.223 (0.208) |
| 2 d | 0.000175 (0.000201) | 0.132 (0.155) | 0.177 (0.155) | 0.208 (0.191) |
| 4 d | 0.000100 (0.000113) | 0.0662 (0.0777) | 0.143 (0.117) | 0.185 (0.165) |
| 7 d | 0.000050 (0.000054) | 0.0379 (0.0444) | 0.116 (0.0866) | 0.162 (0.138) |
| 14 d | 0.000017 (0.000017) | 0.0308 (0.0222) | 0.0888 (0.0586) | 0.131 (0.105) |
| 21 d | 0.000031 (0.000030) | 0.0206 (0.0155) | 0.0934 (0.0639) | 0.116 (0.0884) |
| 28 d | 0.000011 (0.000010) | 0.0154 (0.0116) | 0.0805 (0.0521) | 0.109 (0.0807) |
| 42 d | 0.000008 (0.000006) | 0.0115 (0.00777) | 0.0682 (0.0420) | 0.0972 (0.0693) |
Crop and growth stage: Strawberries (Vegetables, fruiting)
BBCH 19-89
Number of applications: 2
Interval (d): 7
Application rate(s): 125 g a.s./ha
Application window: Mar-May
Crop Interception: Minimal crop cover (25%)

| FOCUS STEP 1 Scenario | Day after overall maximum | PEC$_{SW}$ (µg/L) | PEC$_{SED}$ (µg/kg) |
|------------------------|---------------------------|------------------|---------------------|
|                        |                           | Actual           | TWA                 | Actual              | TWA                 |
| 0 h                    | 11.4393                   | 235.3268         |                     |
| 24 h                   | 7.0162                    | 9.2278           | 160.4601            | 197.8934            |
| 2 d                    | 4.6556                    | 7.4916           | 106.4738            | 164.7602            |
| 4 d                    | 2.0499                    | 5.3341           | 46.8807             | 118.7044            |
| 7 d                    | 0.5989                    | 3.5534           | 13.6969             | 79.3893             |
| 14 d                   | 0.0339                    | 1.8751           | 0.7758              | 41.9449             |
| 21 d                   | 0.0019                    | 1.2538           | 0.0439              | 28.0482             |
| 28 d                   | 0.0001                    | 0.9405           | 0.0025              | 21.0398             |
| 42 d                   | 0.0000                    | 0.6270           | 0.0000              | 14.0267             |

| FOCUS STEP 2 Scenario | Day after overall maximum | PEC$_{SW}$ (µg/L) Multiple Applications (Single Application) | PEC$_{SED}$ (µg/kg) Multiple Applications (Single Application) |
|------------------------|---------------------------|-------------------------------------------------------------|-------------------------------------------------------------|
|                        |                           | Actual (TWA)       | Actual (TWA)       |                           | Actual (TWA)       | Actual (TWA)       |
| Northern EU            | 0 h                       | 1.0348 (1.1496)    | 2.7299 (2.8722)    |                           | 2.2342 (2.3842)    | 2.4820 (2.6282)    |
|                        | 24 h                      | 0.3482 (0.3799)    | 0.6915 (0.7647)    | 2.2342 (2.3842)          | 2.4820 (2.6282)    |
|                        | 2 d                       | 0.1747 (0.1883)    | 0.4765 (0.5244)    | 1.5529 (1.6617)          | 2.1878 (2.3256)    |
|                        | 4 d                       | 0.0843 (0.0893)    | 0.2973 (0.3255)    | 1.0105 (1.0658)          | 1.7618 (1.8696)    |
|                        | 7 d                       | 0.0195 (0.0205)    | 0.1878 (0.2049)    | 0.2952 (0.3114)          | 1.2593 (1.3348)    |
|                        | 14 d                      | 0.0011 (0.0012)    | 0.0971 (0.1059)    | 0.0167 (0.0176)          | 0.6788 (0.7193)    |
|                        | 21 d                      | 0.0001 (0.0001)    | 0.0649 (0.0707)    | 0.0009 (0.0010)          | 0.4544 (0.4815)    |
|                        | 28 d                      | 0.0000 (0.0000)    | 0.0487 (0.0530)    | 0.0001 (0.0001)          | 0.3409 (0.3612)    |
|                        | 42 d                      | 0.0000 (0.0000)    | 0.0324 (0.0354)    | 0.0000 (0.0000)          | 0.2273 (0.2408)    |
| Southern EU            | 0 h                       | 1.0348 (1.1496)    | 2.7299 (2.8722)    |                           | 2.2342 (2.3842)    | 2.4820 (2.6282)    |
|                        | 24 h                      | 0.3482 (0.3799)    | 0.6915 (0.7647)    | 2.2342 (2.3842)          | 2.4820 (2.6282)    |
|                        | 2 d                       | 0.1747 (0.1883)    | 0.4765 (0.5244)    | 1.5529 (1.6617)          | 2.1878 (2.3256)    |
|                        | 4 d                       | 0.0995 (0.1045)    | 0.2992 (0.3274)    | 1.2411 (1.2963)          | 1.8775 (1.9853)    |
|                        | 7 d                       | 0.0239 (0.0250)    | 0.1927 (0.2098)    | 0.3626 (0.3787)          | 1.3831 (1.4585)    |
|                        | 14 d                      | 0.0014 (0.0014)    | 0.1003 (0.1090)    | 0.0205 (0.0215)          | 0.7520 (0.7923)    |
|                        | 21 d                      | 0.0001 (0.0001)    | 0.0670 (0.0729)    | 0.0012 (0.0012)          | 0.5036 (0.5306)    |
| FOCUS STEP 3 Scenario | Water body | Day after overall maximum | PEC_{SW} (µg/L) Multiple Applications (Single Application) | PEC_{SED} (µg/kg) Multiple Applications (Single Application) |
|-----------------------|------------|---------------------------|----------------------------------------------------------|----------------------------------------------------------|
| D6                    | Ditch      | 0 h                       | 0.690 (0.790)                                            | 0.366 (0.419)                                            |
|                       |            | 24 h                      | 0.259 (0.297)                                            | 0.328 (0.375)                                            |
|                       |            | 2 d                       | 0.0283 (0.0324)                                          | 0.283 (0.323)                                            |
|                       |            | 4 d                       | 0.00451 (0.00517)                                        | 0.221 (0.252)                                            |
|                       |            | 7 d                       | 0.000739 (0.000844)                                      | 0.168 (0.191)                                            |
|                       |            | 14 d                      | 0.00203 (0.00175)                                        | 0.217 (0.133)                                            |
|                       |            | 21 d                      | 0.000547 (0.000229)                                      | 0.144 (0.108)                                            |
|                       |            | 28 d                      | 0.000106 (0.000063)                                      | 0.117 (0.093)                                            |
|                       |            | 42 d                      | 0.000072 (0.000052)                                      | 0.0916 (0.0753)                                          |
| R2                    | Stream     | 0 h                       | 0.597 (0.690)                                            | 0.248 (0.241)                                            |
|                       |            | 24 h                      | 0.000045 (0.000046)                                      | 0.241 (0.234)                                            |
|                       |            | 2 d                       | 0.000034 (0.000034)                                      | 0.245 (0.239)                                            |
|                       |            | 4 d                       | 0.0231 (0.0231)                                          | 0.236 (0.229)                                            |
|                       |            | 7 d                       | 0.000069 (0.000068)                                      | 0.226 (0.220)                                            |
|                       |            | 14 d                      | 0.000026 (0.000025)                                      | 0.211 (0.206)                                            |
|                       |            | 21 d                      | 0.000016 (0.000015)                                      | 0.201 (0.197)                                            |
|                       |            | 28 d                      | 0.000012 (0.000011)                                      | 0.193 (0.189)                                            |
|                       |            | 42 d                      | 0.000011 (0.000010)                                      | 0.181 (0.177)                                            |
| R3                    | Stream     | 0 h                       | 0.637 (0.737)                                            | 0.196 (0.183)                                            |
|                       |            | 24 h                      | 0.00241 (0.00274)                                        | 0.171 (0.156)                                            |
### FOCUS Step 4: Percentage mitigation required to meet calculated RACs. Shaded cells require more than 95% mitigation. So indicate the situations where low risk was not demonstrated, when complying with FOCUS 2007 Landscape and mitigation guidance.

| FOCUS Step 3 Scenario | Max PEC<sub>sw</sub> (µg/L) | Mitigation Required for First Tier RAC (0.052 µg/L) (%) | Mitigation Required for Higher Tier RAC (0.128 µg/L) (%) |
|-----------------------|-----------------------------|-------------------------------------------------------|-------------------------------------------------------|
|                       | Multiple Applications | Single Applications |                                            |                                                      |
| D6-Ditch              | 0.69                      | 0.79                      | 93.4                                      | 83.8                                                  |
| R2-Stream             | 0.597                     | 0.69                      | 92.5                                      | 81.4                                                  |
| R3-Stream             | 0.637                     | 0.737                     | 92.9                                      | 82.6                                                  |
| R4-Stream             | 0.451                     | 0.522                     | 90.0                                      | 75.5                                                  |
Crop and growth stage: Strawberries (Vegetables, fruiting)
BBCH 19-89
Number of applications: 2
Interval (d): 7
Application rate(s): 150 g a.s./ha
Application window: Mar-May
Crop Interception: Full canopy (70%)

### FOCUS STEP 1

| Scenario          | Day after overall maximum | PEC\textsubscript{SW} (µg/L) | PEC\textsubscript{SED} (µg/kg) |
|-------------------|---------------------------|-----------------------------|-------------------------------|
|                   |                           | Actual          | TWA     | Actual          | TWA     |
| 0 h               |                           | 13.7272         |         | 282.3922       |         |
| 24 h              |                           | 8.4194          | 11.0733 | 192.5521       | 237.4721|
| 2 d               |                           | 5.5867          | 8.9899  | 127.7686       | 197.7122|
| 4 d               |                           | 2.4599          | 6.4009  | 56.2569        | 142.4452|
| 7 d               |                           | 0.7187          | 4.2641  | 16.4362        | 95.2671 |
| 14 d              |                           | 0.0407          | 2.2501  | 0.9310         | 50.3339 |
| 21 d              |                           | 0.0023          | 1.5045  | 0.0527         | 33.6579 |
| 28 d              |                           | 0.0001          | 1.1286  | 0.0030         | 25.2477 |
| 42 d              |                           | 0.0000          | 0.7524  | 0.0000         | 16.8320 |

### FOCUS STEP 2

| Scenario          | Day after overall maximum | PEC\textsubscript{SW} (µg/L) Multiple Applications (Single Application) | PEC\textsubscript{SED} (µg/kg) Multiple Applications (Single Application) |
|-------------------|---------------------------|-------------------------------------------------|-------------------------------------------------|
|                   |                           | Actual          | TWA     | Actual          | TWA     |
| Northern EU       | 0 h                       | 1.2418 (1.3795) |         | 3.2759 (3.4466) |         |
|                   | 24 h                      | 0.4179 (0.4558) | 0.8298 (0.9177) | 2.6810 (2.8611) | 2.9785 (3.1538) |
|                   | 2 d                       | 0.2097 (0.2259) | 0.5718 (0.6293) | 1.8635 (1.9941) | 2.6254 (2.7907) |
|                   | 4 d                       | 0.0903 (0.0962) | 0.3554 (0.3892) | 1.0465 (1.1129) | 2.0308 (2.1602) |
|                   | 7 d                       | 0.0201 (0.0214) | 0.2218 (0.2424) | 0.3058 (0.3252) | 1.4221 (1.5126) |
|                   | 14 d                      | 0.0011 (0.0012) | 0.1143 (0.1247) | 0.0173 (0.0184) | 0.7620 (0.8105) |
|                   | 21 d                      | 0.0001 (0.0001) | 0.0763 (0.0833) | 0.0010 (0.0010) | 0.5099 (0.5424) |
|                   | 28 d                      | 0.0000 (0.0000) | 0.0572 (0.0625) | 0.0001 (0.0001) | 0.3825 (0.4069) |
|                   | 42 d                      | 0.0000 (0.0000) | 0.0382 (0.0417) | 0.0000 (0.0000) | 0.2550 (0.2712) |
| Southern EU       | 0 h                       | 1.2418 (1.3795) |         | 3.2759 (3.4466) |         |
|                   | 24 h                      | 0.4179 (0.4558) | 0.8298 (0.9177) | 2.6810 (2.8611) | 2.9785 (3.1538) |
|                   | 2 d                       | 0.2097 (0.2259) | 0.5718 (0.6293) | 1.8635 (1.9941) | 2.6254 (2.7907) |
|                   | 4 d                       | 0.0976 (0.1035) | 0.3563 (0.3901) | 1.1572 (1.2236) | 2.0863 (2.2157) |
|                   | 7 d                       | 0.0223 (0.0236) | 0.2242 (0.2447) | 0.3381 (0.3575) | 1.4815 (1.5720) |
|                   | 14 d                      | 0.0013 (0.0013) | 0.1158 (0.1263) | 0.0192 (0.0202) | 0.7971 (0.8456) |
| FOCUS STEP 3 Scenario | Water Body | Day after overall maximum | PEC<sub>SW</sub> (µg/L) Multiple Applications (Single Application) | PEC<sub>SED</sub> (µg/kg) Multiple Applications (Single Application) |
|-----------------------|------------|---------------------------|-------------------------------------------------|-------------------------------------------------|
|                       |            | Actual | TWA | Actual | TWA |
| D6                    | Ditch      | 0 h    | 0.829 (0.948) | 0.473 (0.407) |
|                       |            | 24 h   | 0.198 (0.226) | 0.429 (0.361) | 0.465 (0.399) |
|                       |            | 2 d    | 0.0138 (0.0154) | 0.289 (0.330) | 0.378 (0.308) | 0.447 (0.380) |
|                       |            | 4 d    | 0.00306 (0.00316) | 0.147 (0.168) | 0.309 (0.239) | 0.407 (0.339) |
|                       |            | 7 d    | 0.00150 (0.00146) | 0.0850 (0.0969) | 0.250 (0.182) | 0.360 (0.291) |
|                       |            | 14 d   | 0.000440 (0.000377) | 0.0829 (0.0488) | 0.187 (0.126) | 0.292 (0.224) |
|                       |            | 21 d   | 0.000247 (0.000194) | 0.0562 (0.0327) | 0.156 (0.102) | 0.262 (0.188) |
|                       |            | 28 d   | 0.000111 (0.000083) | 0.0423 (0.0245) | 0.137 (0.0873) | 0.248 (0.165) |
|                       |            | 42 d   | 0.000210 (0.000147) | 0.0283 (0.0164) | 0.113 (0.0704) | 0.217 (0.137) |
| R2                    | Stream     | 0 h    | 0.727 (0.841) | 0.242 (0.232) |
|                       |            | 24 h   | 0.000089 (0.000087) | 0.0785 (0.0908) | 0.236 (0.227) | 0.239 (0.230) |
|                       |            | 2 d    | 0.000067 (0.000064) | 0.0393 (0.0454) | 0.231 (0.222) | 0.236 (0.227) |
|                       |            | 4 d    | 0.000040 (0.000037) | 0.0197 (0.0227) | 0.223 (0.214) | 0.232 (0.223) |
|                       |            | 7 d    | 0.000021 (0.000019) | 0.0113 (0.0130) | 0.215 (0.206) | 0.226 (0.217) |
|                       |            | 14 d   | 0.000085 (0.000083) | 0.0113 (0.00747) | 0.201 (0.194) | 0.217 (0.209) |
|                       |            | 21 d   | 0.000029 (0.0000278) | 0.00815 (0.00500) | 0.192 (0.185) | 0.210 (0.202) |
|                       |            | 28 d   | 0.000018 (0.000018) | 0.00612 (0.00375) | 0.184 (0.178) | 0.205 (0.197) |
|                       |            | 42 d   | 0.000012 (0.000011) | 0.00409 (0.00251) | 0.172 (0.166) | 0.196 (0.189) |
| R3                    | Stream     | 0 h    | 0.765 (0.885) | 0.285 (0.242) |
|                       |            | 24 h   | 0.00255 (0.00276) | 0.252 (0.291) | 0.252 (0.211) | 0.275 (0.233) |
|     | 2 d       | 4 d       | 7 d       | 14 d      | 21 d      | 28 d      | 42 d      |
|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|     | 0.0000864 (0.000843) | 0.0119 (0.0119) | 0.000305 (0.000276) | 0.000130 (0.000110) | 0.000073 (0.000059) | 0.000016 (0.000016) | 0.000031 (0.000025) |
|     | 0.127 (0.146) | 0.0645 (0.0743) | 0.0379 (0.0435) | 0.0375 (0.0223) | 0.0252 (0.0149) | 0.0189 (0.0112) | 0.0126 (0.00747) |
|     | 0.225 (0.184) | 0.217 (0.178) | 0.182 (0.146) | 0.170 (0.140) | 0.152 (0.126) | 0.140 (0.117) | 0.123 (0.104) |
|     | 0.261 (0.219) | 0.238 (0.197) | 0.223 (0.183) | 0.201 (0.164) | 0.188 (0.154) | 0.178 (0.146) | 0.163 (0.134) |

**FOCUS Step 4**: Percentage mitigation required to meet calculated RACs. Shaded cells require more than 95% mitigation, so indicate the situations where low risk was not demonstrated, when complying with FOCUS 2007 Landscape and mitigation guidance.

| FOCUS Step 3 Scenario | Max PEC\textsubscript{sw} (µg/L) | Mitigation Required for First Tier RAC (0.052 µg/L) (%) | Mitigation Required for Higher Tier RAC (0.128 µg/L) (%) |
|-----------------------|----------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| D6-Ditch              | 0.829                            | 94.5                                                   | 86.5                                                   |
| R2-Stream             | 0.727                            | 93.8                                                   | 84.8                                                   |
| R3-Stream             | 0.765                            | 94.1                                                   | 85.5                                                   |
| R4-Stream             | 0.543                            | 91.7                                                   | 79.6                                                   |

R4 Stream:

|     | 0 h       | 24 h      | 2 d       | 4 d       | 7 d       | 14 d      | 21 d      | 28 d      | 42 d      |
|-----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|     | 0.543 (0.628) | 0.111 (0.128) | 0.0631 (0.0711) | 0.0529 (0.0572) | 0.0303 (0.0327) | 0.0284 (0.0217) | 0.0284 (0.0217) | 0.00949 (0.00726) | 0.168 (0.160) |
|     | 0.306 (0.289) | 0.289 (0.273) | 0.293 (0.277) | 0.281 (0.265) | 0.267 (0.252) | 0.246 (0.232) | 0.236 (0.221) | 0.227 (0.213) | 0.213 (0.200) |
Metabolites CGA 321113, CGA 373466, NOA 413161, NOA 413163 and CGA 107170

Parameters used in FOCUSsw step 1 and 2

- Molecular weight: 408.4 (parent value used as default)
- Soil or water metabolite:
  - Koc/Kom (L/Kg): 0 (worst case for PECsw)
- Water Solubility (mg/L): 1000 (default)
- DT50 soil (d): 1000 (default)
- DT50 water/sediment system (d): 1000 (default)
- DT50 water (d): 1000 (default)
- DT50 sediment (d): 1000 (default)
- Crop interception (%): 40%
- Maximum occurrence observed (% molar basis with respect to the parent)
- Total Water and Sediment: 100 (worst case)
- Soil: 100 (worst case)

Application rate

- Crop and growth stage: Apples (BBCH 61-85)
- Number of applications: 3
- Interval (d): 10
- Application rate(s): 112.5 g a.s./ha
- Application window: Mar-May (Early spray drift)

Main routes of entry

| FOCUS STEP 1 Scenario | Day after overall maximum | PECsw (µg/L) Actual | TWA |
|-----------------------|--------------------------|--------------------|-----|
| 0h                    | 145.3466                 |                    |     |
| 24h                   | 145.2459                 | 145.2963           |     |
| 2d                    | 145.1453                 | 145.2459           |     |
| 4d                    | 144.9442                 | 145.1453           |     |
| 7d                    | 144.6431                 | 144.9946           |     |
| 14d                   | 143.9430                 | 144.6437           |     |
| 21d                   | 143.2463                 | 144.2939           |     |
| 28d                   | 142.5529                 | 143.9453           |     |
| 42d                   | 141.1763                 | 143.2513           |     |

| FOCUS STEP 2 Scenario | Day after overall maximum | PECsw (µg/L) Actual | Multiple Applications (Single Application) | TWA |
|-----------------------|---------------------------|--------------------|-------------------------------------------|-----|
| Northern EU 0 h       | 40.0650 (15.4061)         | 40.0511 (15.4008)  |                                           |     |
| 24 h                  | 40.0372 (15.3954)         | 40.0372 (15.3954)  |                                           |     |
| 2 d                   | 40.0095 (15.3848)         | 40.0095 (15.3848)  |                                           |     |
| 4 d                   | 39.9540 (15.3634)         | 40.0095 (15.3848)  |                                           |     |
### FOCUS STEP 2 Scenario

| Day after overall maximum | PEC<sub>SW</sub> (µg/L) | Multiple Applications (Single Application) |
|---------------------------|-------------------------|------------------------------------------|
|                           | Actual                  | TWA                                      |
| 7 d                       | 39.8710 (15.3315)       | 39.9679 (15.3688)                        |
| 14 d                      | 39.6781 (15.2573)       | 39.8715 (15.3316)                        |
| 21 d                      | 39.4860 (15.1835)       | 39.7748 (15.2945)                        |
| 28 d                      | 39.2949 (15.1100)       | 39.6787 (15.2576)                        |
| 42 d                      | 38.9154 (14.9641)       | 39.4874 (15.1840)                        |

### Southern EU

| Day after overall maximum | PEC<sub>SW</sub> (µg/L) | Multiple Applications (Single Application) |
|---------------------------|-------------------------|------------------------------------------|
| 0 h                       | 53.4348 (19.8936)       |                                          |
| 24 h                      | 53.3978 (19.8799)       | 53.4163 (19.8867)                        |
| 2 d                       | 53.3608 (19.8661)       | 53.3978 (19.8799)                        |
| 4 d                       | 53.2869 (19.8386)       | 53.3608 (19.8661)                        |
| 7 d                       | 53.1762 (19.7974)       | 53.3054 (19.8455)                        |
| 14 d                      | 52.9188 (19.7015)       | 53.1764 (19.7974)                        |
| 21 d                      | 52.6626 (19.6062)       | 53.0478 (19.7496)                        |
| 28 d                      | 52.4077 (19.5113)       | 52.9196 (19.7018)                        |
| 42 d                      | 51.9016 (19.3228)       | 52.6645 (19.6069)                        |

### Metabolite CGA 357262

Parameters used in FOCUS<sub>sw</sub> step 1 and 2

- Molecular weight: 408.4 (parent value used as default)
- Soil or water metabolite:
  - Koc/Kom (L/Kg): 0 (worst case for PEC<sub>SW</sub>)
- Water Solubility (mg/L): 1000 (default)
- DT<sub>50</sub> soil (d): 1000 (default)
- DT<sub>50</sub> water/sediment system (d): 1000 (default)
- DT<sub>50</sub> water (d): 1000 (default)
- DT<sub>50</sub> sediment (d): 1000 (default)
- Crop interception (%): 40%
- Maximum occurrence observed (% molar basis with respect to the parent)
  - Total Water and Sediment: 10.1
  - Soil: 0

### Application rate

- Crop and growth stage: Apples (BBCH 61-85)
- Number of applications: 3
- Interval (d): 10
- Application rate(s): 112.5 g a.s./ha
- Application window: Mar-May (Early spray drift)

### Main routes of entry
| FOCUS STEP 1 Scenario | Day after overall maximum | PEC<sub>SW</sub> (µg/L) | Actual | TWA |
|-----------------------|--------------------------|-------------------------|--------|-----|
| 0h                    |                          | 3.3288                  |        |     |
| 24h                   |                          | 3.3265                  | 3.3276 |
| 2d                    |                          | 3.3241                  | 3.3265 |
| 4d                    |                          | 3.3195                  | 3.3241 |
| 7d                    |                          | 3.3126                  | 3.3207 |
| 14d                   |                          | 3.2966                  | 3.3127 |
| 21d                   |                          | 3.2807                  | 3.3046 |
| 28d                   |                          | 2.2648                  | 3.2967 |
| 42d                   |                          | 3.2332                  | 3.2808 |

| FOCUS STEP 2 Scenario | Day after overall maximum | PEC<sub>SW</sub> (µg/L) | Multiple Applications (Single Application) | Actual | TWA |
|-----------------------|--------------------------|-------------------------|------------------------------------------|--------|-----|
| Northern EU           | 0 h                      | 2.7037 (1.1058)         |                                          |        |     |
|                       | 24 h                     | 2.7018 (1.1051)         | 2.7028 (1.1055)                          |        |     |
|                       | 2 d                      | 2.6999 (1.1043)         | 2.7018 (1.1051)                          |        |     |
|                       | 4 d                      | 2.6975 (1.1032)         | 2.7001 (1.1044)                          |        |     |
|                       | 7 d                      | 2.6919 (1.1009)         | 2.6978 (1.1034)                          |        |     |
|                       | 14 d                     | 2.6789 (1.0956)         | 2.6916 (1.1008)                          |        |     |
|                       | 21 d                     | 2.6659 (1.0903)         | 2.6852 (1.0982)                          |        |     |
|                       | 28 d                     | 2.6530 (1.0850)         | 2.6788 (1.0956)                          |        |     |
|                       | 42 d                     | 2.6274 (1.0745)         | 2.6659 (1.0903)                          |        |     |
| Southern EU           | 0 h                      | 2.7037 (1.1058)         |                                          |        |     |
|                       | 24 h                     | 2.7018 (1.1051)         | 2.7028 (1.1055)                          |        |     |
|                       | 2 d                      | 2.6999 (1.1043)         | 2.7018 (1.1051)                          |        |     |
|                       | 4 d                      | 2.6989 (1.1037)         | 2.7003 (1.1044)                          |        |     |
|                       | 7 d                      | 2.6933 (1.1014)         | 2.6985 (1.1036)                          |        |     |
|                       | 14 d                     | 2.6802 (1.0960)         | 2.6926 (1.1012)                          |        |     |
|                       | 21 d                     | 2.6673 (1.0907)         | 2.6863 (1.0986)                          |        |     |
|                       | 28 d                     | 2.6544 (1.0855)         | 2.6799 (1.0960)                          |        |     |
|                       | 42 d                     | 2.6287 (1.0750)         | 2.6671 (1.0907)                          |        |     |
Metabolite NOA 409480

Parameters used in FOCUSsw step 1 and 2

Molecular weight: 408.4 (parent used as default)

Soil or water metabolite:

Koc/Kom (L/Kg): 0 (worst case for PEC\textsubscript{SW})

Water Solubility (mg/L): 1000 (default)

DT\textsubscript{50} soil (d): 1000 (default)

DT\textsubscript{50} water/sediment system (d): 1000 (default)

DT\textsubscript{50} water (d): 1000 (default)

DT\textsubscript{50} sediment (d): 1000 (default)

Crop interception (%): 40%

Maximum occurrence observed (% molar basis with respect to the parent)

Total Water and Sediment: 0

Soil: 9.3

Application rate

Crop and growth stage: Apples (BBCH 61-85)

Number of applications: 3

Interval (d): 10

Application rate(s): 112.5 g a.s./ha

Application window: Mar-May (Early spray drift)

Main routes of entry

| FOCUS STEP 1 Scenario | Day after overall maximum | PEC\textsubscript{SW} (µg/L) | Actual | TWA |
|-----------------------|--------------------------|-----------------------------|--------|-----|
|                       |                          |                             |        |     |
| 0h                    |                          | 10.4658                     |        |     |
| 24h                   |                          | 10.4585                     |        |     |
| 2d                    |                          | 10.4513                     |        |     |
| 4d                    |                          | 10.4368                     |        |     |
| 7d                    |                          | 10.4151                     |        |     |
| 14d                   |                          | 10.3647                     |        |     |
| 21d                   |                          | 10.3145                     |        |     |
| 28d                   |                          | 10.2646                     |        |     |
| 42d                   |                          | 10.1655                     |        |     |

| FOCUS STEP 2 Scenario | Day after overall maximum | PEC\textsubscript{SW} (µg/L) | Multiple Applications (Single Application) | Actual | TWA |
|-----------------------|--------------------------|-----------------------------|-------------------------------------------|--------|-----|
|                       |                          |                             |                                           |        |     |
| Northern EU           |                          | 1.2461 (0.4184)             |                                           |        |     |
| 0 h                   |                          | 1.2452 (0.4181)             | 1.2456 (0.4183)                           |        |     |
| 24 h                  |                          | 1.2443 (0.4179)             | 1.2452 (0.4181)                           |        |     |
| 2 d                   |                          | 1.2426 (0.4173)             | 1.2443 (04179)                            |        |     |
### FOCUS STEP 2 Scenario

| Day after overall maximum | PEC<sub>SW</sub> (µg/L) Multiple Applications (Single Application) |
|---------------------------|---------------------------------------------------------------|
|                           | Actual | TWA            |
| 7 d                       | 1.2400 (0.4164) | 1.2430 (0.4174) |
| 14 d                      | 1.2340 (0.4144) | 1.2400 (0.4164) |
| 21 d                      | 1.2281 (0.4124) | 1.2370 (0.4154) |
| 28 d                      | 1.2221 (0.4104) | 1.2341 (0.4144) |
| 42 d                      | 1.2103 (0.4064) | 1.2281 (0.4124) |

**Southern EU**

| 0 h                       | 2.4895 (0.8358) |
| 24 h                      | 2.4877 (0.8352) | 2.4886 (0.8355) |
| 2 d                       | 2.7860 (0.8346) | 2.4877 (0.8352) |
| 4 d                       | 2.4826 (0.8335) | 2.4860 (0.8346) |
| 7 d                       | 2.4774 (0.8317) | 2.4834 (0.8338) |
| 14 d                      | 2.4654 (0.8277) | 2.4774 (0.8317) |
| 21 d                      | 2.4535 (0.8237) | 2.4714 (0.8297) |
| 28 d                      | 2.4416 (0.8197) | 2.4655 (0.8277) |
| 42 d                      | 2.4180 (0.8118) | 2.4536 (0.8237) |

**Metabolite CGA 357261**

- **Parameters used in FOCUSsw step 1 and 2**
  - Molecular weight: 408.4 (parent value used as default)
  - Soil or water metabolite:
    - Koc (L/Kg): 484
    - Water Solubility (mg/L): 4
    - DT<sub>50</sub> soil (d): 0.25
    - DT<sub>50</sub> water/sediment system (d): 1000 (default)
    - DT<sub>50</sub> water (d): 1000 (default)
    - DT<sub>50</sub> sediment (d): 1000 (default)
  - Crop interception (%): 40%
  - Maximum occurrence observed (% molar basis with respect to the parent)
  - Total Water and Sediment: 51.5
  - Soil: 13.5% stated to originate from a field dissipation study but which one and how it was estimated not available (data gap).

- **Parameters used in FOCUSsw step 3 (if performed)**
  - Not performed (parent values used to estimate exposure of CGA 357261)

- **Application rate**
  - Crop and growth stage: Apples (BBCH 61-85)
  - Number of applications: 3
  - Interval (d): 10
  - Application rate(s): 112.5 g a.s./ha
  - Application window: Mar-May (Early spray drift)

- **Main routes of entry**
A further refinement was carried out beyond FOCUS Step 2 using a conversion from worst case parent PEC\textsubscript{SW} (early application to apples of 112.5 g/ha, scenario R2) to calculate the maximum concentration formed in
water/sediment and the FOCUS Step 2 model to calculate the maximum formation formed in soil. Resultant PEC_{SW} values are below:

| Substance                  | PEC_{SW} Value  |
|----------------------------|-----------------|
| CGA 357261 (single application) | 6.37 µg/L       |
| CGA 357261 (multiple applications) | 7.73 µg/L       |

**Metabolite CGA 357276**

**Parameters used**

- Molecular weight: 318.3
- Soil or water metabolite:
  - Koc (L/Kg): 8074
  - Water Solubility (mg/L): 0.6
  - DT_{50} soil (d): 51.5
  - DT_{50} water/sediment system (d): 1000 (default)
  - DT_{50} water (d): 1000 (default)
  - DT_{50} sediment (d): 1000 (default)
  - Crop interception (%): 40%
- Maximum occurrence observed (% molar basis with respect to the parent)
- Total Water and Sediment: not formed so soil incorporation selected in calculator.
- Soil: 5.6

**Application rate**

- Crop and growth stage: Apples (BBCH 61-85)
- Number of applications: 3
- Interval (d): 10
- Application rate(s): 112.5 g a.s./ha
- Application window: Mar-May soil incorporation (no drift) selected in calculator.

**Parameters used in FOCUSsw step 3 (if performed)**

- -

**Main routes of entry**

| FOCUS STEP 1 Scenario | Day after overall maximum | PEC_{SW} (µg/L) | Actual | TWA |
|-----------------------|---------------------------|-----------------|--------|-----|
|                       |                           |                 |        |     |
|                       | 0h                         | 0.17            |        |     |

| FOCUS STEP 2 Scenario | Day after overall maximum | PEC_{SW} (µg/L) | Multiple Applications (Single Application) | Actual | TWA |
|-----------------------|---------------------------|-----------------|---------------------------------------------|--------|-----|
|                       |                           |                 |                                             |        |     |
|                       | Northern EU 0 h           | 0.03 (0.01)     |                                             |        |     |
|                       | Southern EU 0 h           | 0.06 (0.02)     |                                             |        |     |
Metabolite CGA 321113 (PEC<sub>SED</sub> calculation)

Parameters used in FOCUSsw step 1 and 2

- Molecular weight: 394.4 (parent value used as default)
- Soil or water metabolite:
  - K<sub>oc</sub>(L/Kg): 116.19
  - Water Solubility (mg/L): 21000
  - DT<sub>50</sub> soil (d): 48.10
  - DT<sub>50</sub> water/sediment system (d): 388
  - DT<sub>50</sub> water (d): 388
  - DT<sub>50</sub> sediment (d): 388
- Crop interception (%): 40%
- Maximum occurrence observed (% molar basis with respect to the parent)
- Total Water and Sediment: 100
- Soil: 51.2 stated to originate from a field dissipation study but which one and how it was estimated not available (data gap).

Application rate

- Crop and growth stage: Apples (BBCH 61-85)
- Number of applications: 3
- Interval (d): 10
- Application rate(s): 112.5 g a.s./ha
- Application window: Mar-May (Early spray drift)

Main routes of entry

| FOCUS STEP 1 Scenario | Day after overall maximum | PEC<sub>SED</sub> (µg/kg) Multiple Applications (Single Application) |
|-----------------------|--------------------------|------------------------------------------------------------------|
|                       |                          | Actual | TWA             |
| 0h                    |                          | 55.9616 |                 |
| 24h                   |                          | 87.7172 | 71.8394         |
| 2d                    |                          | 87.5606 | 79.7391         |
| 4d                    |                          | 87.2483 | 83.5717         |
| 7d                    |                          | 86.8720 | 85.0474         |
| 14d                   |                          | 85.7035 | 85.6445         |
| 21d                   |                          | 84.6384 | 85.4863         |
| 28d                   |                          | 83.5866 | 85.1426         |
| 42d                   |                          | 81.5220 | 84.2784         |

| FOCUS STEP 2 Scenario | Day after overall maximum | PEC<sub>SED</sub> (µg/kg) Multiple Applications (Single Application) |
|-----------------------|--------------------------|------------------------------------------------------------------|
|                       |                          | Actual | TWA             |
| 0h Northern EU        |                          | 31.0153 (12.6522) |                 |
| 24 h Northern EU      |                          | 30.9599 (12.6296) | 30.9876 (12.6409) |
| 2d Northern EU        |                          | 30.9046 (12.6070) | 30.9599 (12.6296) |
|          | Southern EU | Metabolites CGA 381318 |
|----------|-------------|------------------------|
| 4 d      | 30.7944 (12.5621) | 30.9047 (12.6071)       |
| 7 d      | 30.6298 (12.4949) | 30.8222 (12.5734)       |
| 14 d     | 30.2492 (12.3397) | 30.6306 (12.4953)       |
| 21 d     | 29.8733 (12.1863) | 30.4407 (12.4178)       |
| 28 d     | 29.5020 (12.0349) | 30.2523 (12.3409)       |
| 42 d     | 28.7733 (11.7376) | 29.8803 (12.1892)       |
|          | 36.5320 (14.7615) |                       |
| 24 h     | 36.4668 (14.7351) | 36.4994 (14.7483)       |
| 2 d      | 36.4017 (14.7088) | 36.4668 (14.7351)       |
| 4 d      | 36.2718 (14.6564) | 36.4018 (14.7089)       |
| 7 d      | 36.0780 (14.5780) | 36.3045 (14.6696)       |
| 14 d     | 35.6296 (14.3969) | 36.0789 (14.5784)       |
| 21 d     | 35.1868 (14.2180) | 35.8552 (14.4880)       |
| 28 d     | 34.7495 (14.0413) | 35.6333 (14.3984)       |
| 42 d     | 33.8912 (13.6944) | 35.1951 (14.2213)       |

Data gap for PECsw.

Metabolites CGA 381318
Estimation of concentrations from other routes of exposure (Regulation (EU) N° 284/2013, Annex Part A, point 9.4)

| Method of calculation | Expert judgment, based on vapour pressure, dimensionless Henry’s Law Constant and information on volatilisation from plants. |
|-----------------------|---------------------------------------------------------------------------------------------------------------|

PEC

| Maximum concentration | negligible |
|------------------------|------------|
Ecotoxicology
Effects on birds and other terrestrial vertebrates (Regulation (EU) N° 283/2013, Annex Part A, point 8.1 and Regulation (EU) N° 284/2013, Annex Part A, point 10.1)

| Species          | Test substance | Time scale | End point | Toxicity (mg/kg bw per day) |
|------------------|----------------|------------|-----------|----------------------------|
| **Birds**        |                |            |           |                            |
| Bobwhite quail   | Trifloxystrobin| Acute      | LD₅₀      | >2000                      |
| Mallard duck     | Trifloxystrobin| Acute      | LD₅₀      | >2250                      |
| Bobwhite quail   | Trifloxystrobin| Long-term  | LD₅₀/10   | 200                        |
| Bobwhite quail   | Trifloxystrobin| Long-term  | NOEL      | 31 (320 ppm)               |
| Mallard duck     | Trifloxystrobin| Long-term  | NOEL      | 500 ppm                    |
| **Mammals**      |                |            |           |                            |
| Rat              | Trifloxystrobin| Acute      | LD₅₀      | >5000                      |
| 'Flint WG 50'    | Acute          | LD₅₀      | >2000     |
| Rat              | NOA 413161     | Acute      | LD₅₀      | >2000                      |
| Rat              | CGA 373466     | Acute      | LD₅₀      | >2000                      |
| Rat              | CGA 357261     | Acute      | LD₅₀      | >2000                      |
| Rat              | NOA 414412     | Acute      | LD₅₀      | >2000                      |
| Rat              | NOA 413163     | Acute      | LD₅₀      | >2000                      |
| Rat              | Trifloxystrobin| Long-term  | BMDL₅     | 22                         |

Endocrine disrupting properties (Annex Part A, points 8.1.5)
With regard to the endocrine disruption potential, as discussed in Section 2, it is unlikely that trifloxystrobin is an endocrine disruptor in mammals, however, no firm conclusion can be drawn regarding other non-target vertebrates.

Additional higher tier studies (Annex Part A, points 10.1.1.2):
- Terrestrial vertebrate wildlife (birds, mammals, reptile and amphibians) (Annex Part A, points 8.1.4, 10.1.3): [To provide available data]

* The applicant proposed the use of benchmark dose modelling (BMD) approach to estimate an appropriate dose to serve as chronic toxicity endpoint. The BMD is a model that estimates the benchmark doses (concentration or dose where a percentage of effect was observed).

Toxicity/exposure ratios for terrestrial vertebrates (Regulation (EU) N° 284/2013, Part A, Annex point 10.1)

| Growth stage | Indicator or focal species | Time scale | DDD (mg/kg bw per day) | TER | Trigger |
|--------------|----------------------------|------------|------------------------|-----|---------|
| Screening Step (Birds)-worst case for all uses |
| All          | Small insectivorous bird   | Acute      | 7.90                   | > 253 | 10      |
| All          | Small herbivorous bird     | Acute      | 17.87                  | > 112 | 10      |
| All          | Small omnivorous bird      | Acute      | 33.35                  | > 60  | 10      |
| All          | Small insectivorous bird   | Long-term  | 1.95                   | 15.9  | 5       |
| All          | Small herbivorous bird     | Long-term  | 4.64                   | 6.7   | 5       |
| All          | Small omnivorous bird      | Long-term  | 8.35                   | 3.7   | 5       |
| Tier 1 (Birds) use on orchards three applications at 75 g a.s./ha |
| BBCH 20 – 39 | Small insectivorous/worm feeding species"thrush" | Long-term | 0.11 | 271 | 5     |
| BBCH 20 – 39 | Small granivorous bird "finch"     | Long-term  | 0.54 | 57  | 5     |
| BBCH 20 – 39 | Small insectivorous bird "tit"     | Long-term  | 1.30 | 24  | 5     |
| BBCH > 40   | Small insectivorous/worm feeding species"thrush" | Long-term | 0.06 | 542 | 5     |
| BBCH > 40   | Small granivorous bird "finch"     | Long-term  | 0.27 | 114 | 5     |
| Growth stage | Indicator or focal species | Time scale | DDD (mg/kg bw per day) | TER | Trigger |
|--------------|---------------------------|------------|------------------------|-----|---------|
| BBCH > 40    | Small insectivorous bird "tit" | Long-term | 1.30                   | 24  | 5       |

**Tier 1 (Birds) use on orchards three applications at 112.5 g a.s./ha**

| BBCH > 40 | Small insectivorous/worm feeding species "thrush" | Long-term | 0.09                   | 361 | 5       |
| BBCH > 40 | Small granivorous bird "finch"                  | Long-term | 0.41                   | 76  | 5       |
| BBCH > 40 | Small insectivorous bird "tit"                  | Long-term | 1.95                   | 16  | 5       |

**Tier 1 (Birds) use on grapes three applications at 125 g a.s./ha**

| BBCH 10 – 19 | Small insectivorous species "Redstart" | Long-term | 1.37                   | 22.6 | 5       |
| BBCH 10 – 19 | Small granivorous bird "Finch"          | Long-term | 0.82                   | 37.6 | 5       |
| BBCH 10 – 19 | Small omnivorous bird "lark"            | Long-term | 0.78                   | 40.0 | 5       |
| BBCH ≥20    | Small insectivorous species "Redstart"  | Long-term | 1.18                   | 26.3 | 5       |
| BBCH 20-39  | Small granivorous bird "Finch"          | Long-term | 0.68                   | 45.6 | 5       |
| BBCH 20-39  | Small omnivorous bird "lark"            | Long-term | 0.64                   | 48.1 | 5       |
| BBCH ≥20    | Small insectivorous species "Redstart"  | Long-term | 1.18                   | 26.3 | 5       |
| BBCH ≥40    | Small granivorous bird "Finch"          | Long-term | 0.41                   | 76.5 | 5       |
| BBCH ≥40    | Small omnivorous bird "lark"            | Long-term | 0.39                   | 78.8 | 5       |

**Ripening**

| BBCH ≥20    | Frugivorous bird “Thrush/starling”       | Long-term | 1.72                   | 18.1 | 5       |
| BBCH ≥40    | Small insectivorous species "Redstart"   | Long-term | 1.18                   | 26.3 | 5       |
| BBCH ≥40    | Small granivorous bird "Finch"           | Long-term | 0.41                   | 76.5 | 5       |
| BBCH ≥40    | Small omnivorous bird "lark"             | Long-term | 0.39                   | 78.8 | 5       |

**Tier 1 (Birds) use on strawberries two applications of 125 g a.s./ha**

| BBCH 10-39  | Small omnivorous bird “lark”             | Long-term | 1.16                   | 26.8 | 5       |
| BBCH 61-89  | Frugivorous bird “starling”              | Long-term | 1.42                   | 21.8 | 5       |
| BBCH 10-19  | Small insectivorous bird “wagtail”       | Long-term | 1.20                   | 25.9 | 5       |
| BBCH ≥ 20   | Small insectivorous bird “wagtail”       | Long-term | 1.03                   | 30.1 | 5       |
| BBCH ≥ 40   | Small omnivorous bird “lark”             | Long-term | 0.47                   | 66.5 | 5       |

**Tier 1 (Birds) use on strawberries two applications of 150 g a.s./ha**

| BBCH 61-89  | Frugivorous bird “starling”              | Long-term | 1.70                   | 18.2 | 5       |
| BBCH ≥20    | Small insectivorous bird “wagtail”       | Long-term | 1.23                   | 25.1 | 5       |
| BBCH ≥40    | Small omnivorous bird “lark”             | Long-term | 0.56                   | 55.4 | 5       |

**Higher tier (birds): Not required**

**Screening Step (Mammals)**
| Growth stage | Indicator or focal species | Time scale | DDD (mg/kg bw per day) | TER | Trigger |
|--------------|----------------------------|------------|------------------------|-----|---------|
| All          | Small herbivorous mammal   | Acute      | 25.6                   | > 196 | 10      |
| All          | Small herbivorous mammal   | Long-term  | 8.62                   | 2.6  | 5       |

Toxicity endpoint refinement (Mammals): A BMDL₃ value of 22 mg a.s./kg bw/day was used

**Tier 1 (Mammals) use on orchards three applications at 75 g a.s./ha**

| Growth stage | Indicator or focal species | Time scale | DDD (mg/kg bw per day) | TER | Trigger |
|--------------|----------------------------|------------|------------------------|-----|---------|
| BBCH 20-40   | Small herbivorous mammal   | Long-term  | 3.11                   | 7.1  | 5       |
| BBCH 20-40   | Large herbivorous mammal   | Long-term  | 0.62                   | 35.5 | 5       |
| BBCH 20-40   | Small omnivorous mammal    | Long-term  | 0.34                   | 64.7 | 5       |
| BBCH ≥40     | Large herbivorous mammal   | Long-term  | 0.31                   | 71.0 | 5       |
| BBCH ≥40     | Small omnivorous mammal    | Long-term  | 0.16                   | 137.5| 5       |
| BBCH ≥40     | Small herbivorous mammal   | Long-term  | 1.55                   | 14.2 | 5       |
| BBCH ≥40     | Frugivorous mammal         | Long-term  | 1.62                   | 13.6 | 5       |

**Tier 1 (Mammals) use on orchards three applications at 112.5 g a.s./ha**

| Growth stage | Indicator or focal species | Time scale | DDD (mg/kg bw per day) | TER | Trigger |
|--------------|----------------------------|------------|------------------------|-----|---------|
| BBCH ≥40     | Small herbivorous mammal   | Long-term  | 2.33                   | 9.4  | 5       |
| BBCH ≥40     | Large herbivorous mammal   | Long-term  | 0.46                   | 47.8 | 5       |
| BBCH 71-79   | Small omnivorous mammal    | Long-term  | 0.25                   | 88.0 | 5       |
| BBCH ≥40     | Frugivorous mammal         | Long-term  | 2.44                   | 9.0  | 5       |

**Tier 1 (Mammals) use on strawberries two applications at 150 g a.s./ha**

| Growth stage | Indicator or focal species | Time scale | DDD (mg/kg bw per day) | TER | Trigger |
|--------------|----------------------------|------------|------------------------|-----|---------|
| BBCH ≥20     | Small insectivorous mammal | Long-term  | 0.24                   | 91.0 | 5       |
| BBCH ≥40     | Small herbivorous mammal   | Long-term  | 3.68                   | 6.0  | 5       |
| BBCH ≥40     | Large herbivorous mammal   | Long-term  | 0.73                   | 30.34| 5       |
| BBCH ≥40     | Small omnivorous mammal    | Long-term  | 0.39                   | 55.8 | 5       |

**Tier 1 (Mammals) use on strawberries two applications at 125 g a.s./ha**

| Growth stage | Indicator or focal species | Time scale | DDD (mg/kg bw per day) | TER | Trigger |
|--------------|----------------------------|------------|------------------------|-----|---------|
| BBCH 10-19   | Small insectivorous mammal | Long-term  | 0.45                   | 48.9 | 5       |
| BBCH ≥40     | Small herbivorous mammal   | Long-term  | 3.06                   | 7.2  | 5       |
| BBCH ≥20     | Small insectivorous mammal | Long-term  | 0.20                   | 110  | 5       |
| BBCH 10-39   | Large herbivorous mammal   | Long-term  | 1.52                   | 14.5 | 5       |
| BBCH ≥40     | Large herbivorous mammal   | Long-term  | 0.60                   | 36.74| 5       |
| BBCH 10-39   | Small omnivorous mammal    | Long-term  | 0.83                   | 26.5 | 5       |
| BBCH ≥40     | Small omnivorous mammal    | Long-term  | 0.33                   | 67.0 | 5       |

**Tier 1 (Mammals) use on grapes three applications at 125 g a.s./ha**
### Growth stage

| Indicator or focal species | Time scale | DDD (mg/kg bw per day) | TER | Trigger |
|---------------------------|------------|------------------------|-----|---------|
| Large herbivorous mammal “lagomorph” | Long-term | 0.80 | 27.5 | 5 |
| Small insectivorous mammal “shrew” | Long-term | 0.50 | 43.9 | 5 |
| Small herbivorous mammal “vole” | Long-term | 5.18 | 4.3 | 5 |
| Small omnivorous mammal “mouse” | Long-term | 0.56 | 39.3 | 5 |
| Large herbivorous mammal “lagomorph” | Long-term | 0.66 | 33.5 | 5 |
| Small insectivorous mammal “shrew” | Long-term | 0.39 | 55.9 | 5 |
| Small herbivorous mammal “vole” | Long-term | 0.23 | 97.1 | 5 |
| Small omnivorous mammal “mouse” | Long-term | 4.30 | 5.1 | 5 |
| Small herbivorous mammal “vole” | Long-term | 2.59 | 8.5 | 5 |
| Small omnivorous mammal “mouse” | Long-term | 0.47 | 47.3 | 5 |
| Small omnivorous mammal “mouse” | Long-term | 0.27 | 7.1 | 5 |

### Risk from bioaccumulation and food chain behaviour

| Test substance | Indicator or focal species | Time scale | DDD (mg/kg bw per day) | TER | Trigger |
|----------------|---------------------------|------------|------------------------|-----|---------|
| Earthworm-eating birds | Long-term | 1.38 | 23 | 5 |
| Earthworm-eating birds | Long-term | 0.24 | 13 | 5 |
| Earthworm-eating birds | Long-term | 0.09 | 36 | 5 |
| Earthworm-eating birds | Long-term | 0.15 | 21 | 5 |
| Earthworm-eating mammals | Long-term | 1.68 | 13 | 5 |
| Earthworm-eating mammals | Long-term | 0.29 | 7.6 | 5 |
| Earthworm-eating mammals | Long-term | 0.10 | 21 | 5 |
| Earthworm-eating mammals | Long-term | 0.19 | 12 | 5 |
| Fish-eating birds | Long-term | 0.11 | 284 | 5 |
| Fish-eating mammals | Long-term | 0.10 | 226 | 5 |

Higher tier : Not required

**Risk from consumption of contaminated water:** The worst case application rate was 150 g a.s./ha. When considering the ratio of application rate to toxicity endpoints for both birds and mammals (as described in EFSA bird and mammal guidance 2009) an assessment for drinking water is not required. For birds the toxicity endpoint is 31 mg a.s./kg bw/day and the ratio is 4.8. For mammals the toxicity endpoint is 22.0 mg a.s./kg bw/day and the ratio is 6.82. Both are under the trigger value of 3000.

**Toxicity data for all aquatic tested species (Regulation (EU) N° 283/2013, Annex Part A, points 8.2 and Regulation (EU) N° 284/2013 Annex Part A, point 10.2)**
| Group | Test substance | Time-scale (Test type) | End point | Toxicity |
|-------|----------------|------------------------|-----------|----------|
| **Laboratory tests** | | | | |
| **Fish** | | | | |
| O. mykiss | a.s. | 96 hr (flow-through) | Mortality, LC₅₀ | 0.015 mg a.s./L (mm) |
| L. macrochirus | a.s. (≥ 96.0% purity) | 96 hr (flow-through) | Mortality, LC₅₀ | 0.054 mg a.s./L (mm) |
| C. variegatus | a.s. (≥ 96.0% purity) | 96 hr (flow-through) | Mortality, LC₅₀ | 0.078 mg a.s./L (mm) |
| O. mykiss | CGA 321113 | 96 hr (flow-through) | Mortality, LC₅₀ | > 106 mg p.m./L (mm) |
| O. mykiss | NOA 413161 | 96 hr (static) | Mortality, LC₅₀ | > 100 mg p.m./L (nom) |
| O. mykiss | CGA 357261 | 96 hr (semi-static) | Mortality, LC₅₀ | 0.9 mg p.m./L (mm) |
| O. mykiss | CGA 373466 | 96 hr (static) | Mortality, LC₅₀ | > 200 mg p.m./L (nom) |
| O. mykiss | NOA 413163 | 96 hr (static) | Mortality, LC₅₀ | > 100 mg p.m./L (nom) |
| O. mykiss | CGA 357262 | 96 hr (static) | Mortality, LC₅₀ | > 5.51 mg p.m./L (mm) |
| O. mykiss | CGA 107170 | 96 hr (semi-static) | Mortality, LC₅₀ | 13.6 mg p.m./L (mm) |
| O. mykiss | "Trifloxystrobin WG 50" | 96 hr (flow-through) | Mortality, LC₅₀ | 0.036 mg prep./L (mm) (0.018 mg a.s./L (mm)) |
| **Chronic fish studies** | | | | |
| O. mykiss | a.s. | Chronic (95 d ELS flow-through) | Swim up, NOEC EC₁₀ Survival at the end of the test | 0.0043 mg a.s./L (mm) |
| | | | EC₂₀ Survival at the end of the test | 0.0075 mg a.s./L (mm) |
| | | | | 0.0079 mg a.s./L (mm) |
| O. mykiss | CGA 321113 | 28 d (flow-through) | Mortality, growth, NOEC | ≥ 100 mg p.m./L (nom) |
| **Acute aquatic invertebrates** | | | | |
| D. magna | a.s. (≥ 96.0% purity) | 48 h (flow-through) | Immobilization, EC₅₀ | 0.016 mg a.s./L (mm) |
| | | | > 0.0748 mg a.s./L (mm) |
| D. magna | a.s. (≥ 96.0% purity) | 48 h (flow-through) | Immobilization, EC₅₀ | 0.0253 mg a.s./L (mm) |
| P. acutus acutus | a.s. | 96 h (flow-through) | Mortality, LC₅₀ | > 0.31 mg a.s./L (mm) |
| C. virginica | a.s. (≥ 96.0% purity) | 48h (flow-through) | Shell growth, mortality EC₅₀/ LC₅₀ | 0.035 >0.0748 mg a.s./L (mm) |
| D. magna | CGA 321113 | 48 h (static) | Immobilization, EC₅₀ | > 100 mg p.m./L (nom) |
| D. magna | CGA 321113 | 48 h (static) | Immobilization, EC₅₀ | 38 mg p.m./L (nom) |
| D. magna | NOA 413161 | 48 h (static) | Immobilization, EC₅₀ | > 100 mg p.m./L (nom) |
| D. magna | CGA 357276 | 48 h (static) | Immobilization, EC₅₀ | 0.514 mg p.m./L (nom) |
| D. magna | CGA 373466 | 48 h (static) | Immobilization, EC₅₀ | > 100 mg p.m./L (nom) |
| Group            | Test substance     | Time-scale (Test type) | End point                                      | Toxicity                                      |
|------------------|--------------------|------------------------|------------------------------------------------|-----------------------------------------------|
| *D. magna*       | NOA 413163         | 48 h (static)          | Immobilization, EC<sub>20</sub>                | > 100 mg p.m./L<sub>(nom)</sub>              |
| *D. magna*       | NOA 409480         | 48 h (static)          | Immobilization, EC<sub>20</sub>                | 2.25 mg p.m./L<sub>(nom)</sub>               |
| *D. magna*       | CGA 357262         | 48 h (static)          | Immobilization, EC<sub>20</sub>                | >2.24 mg p.m./L<sub>(nom)</sub>              |
| *D. magna*       | CGA 107170         | 48 h (static)          | Immobilization, EC<sub>20</sub>                | 22.7 mg p.m./L<sub>(nom)</sub>               |
| *D. magna*       | “Trifloxystrobin WG 50” | 48 h (static)          | Immobilization, EC<sub>20</sub>                | 0.010 mg prep./L<sub>(nom)</sub> (0.0052 mg a.s./L<sub>(nom)</sub>) |

**Chronic invertebrate**

| *D. magna*       | a.s.               | 21 d (flow-through)   | Reproduction, NOEC bodyweight, F<sub>1</sub> generation EC<sub>10</sub> bodyweight, F<sub>1</sub> generation EC<sub>20</sub> | 0.00276 mg a.s./L 0.00328 mg a.s./L 0.00459 mg a.s./L<sub>(nom)</sub> |

**Algae**

| *S. subspicatus* | a.s.               | 72 h (static)          | E<sub>i</sub>C<sub>50</sub> E<sub>i</sub>C<sub>50</sub> E<sub>i</sub>C<sub>10</sub> | 0.0174 mg a.s./L<sub>(nom)</sub> 0.0053 mg a.s./L<sub>(nom)</sub> 0.0025 mg a.s./L<sub>(nom)</sub> |
| *P. subcapitata* | CGA 321113         | 72 h (static)          | E<sub>i</sub>C<sub>50</sub> E<sub>i</sub>C<sub>50</sub> NOEC | >100 mg p.m./L<sub>(nom)</sub> >100 mg p.m./L<sub>(nom)</sub> 18 mg p.m./L<sub>(nom)</sub> |
| *P. subcapitata* | NOA 413161         | 72 h (static)          | E<sub>i</sub>C<sub>50</sub> E<sub>i</sub>C<sub>50</sub> NOEC | >100 mg p.m./L<sub>(nom)</sub> >100 mg p.m./L<sub>(nom)</sub> 21 mg p.m./L<sub>(nom)</sub> |
| *P. subcapitata* | CGA 357276         | 72 h (static)          | E<sub>i</sub>C<sub>50</sub>/E<sub>i</sub>C<sub>50</sub>/ E<sub>i</sub>C<sub>50</sub> NOEC | >5.86 mg p.m./L<sub>(nom)</sub> 0.381 mg p.m./L<sub>(nom)</sub> |
| *P. subcapitata* | NOA 413163         | 72 h (static)          | E<sub>i</sub>C<sub>50</sub> E<sub>i</sub>C<sub>50</sub> NOEC | >100 mg p.m./L<sub>(nom)</sub> >100 mg p.m./L<sub>(nom)</sub> 45 mg p.m./L<sub>(nom)</sub> |
| *P. subcapitata* | NOA 409480         | 72 h (static)          | E<sub>i</sub>C<sub>50</sub> E<sub>i</sub>C<sub>50</sub>/E<sub>i</sub>C<sub>50</sub> NOEC | >2.02 mg p.m./L<sub>(nom)</sub> 1.292 mg p.m./L<sub>(nom)</sub> 1.06 mg p.m./L<sub>(nom)</sub> |
| *P. subcapitata* | CGA 357262         | 72 h (static)          | E<sub>i</sub>C<sub>50</sub>/E<sub>i</sub>C<sub>50</sub>/E<sub>i</sub>C<sub>50</sub> NOEC | > 2.65 mg p.m./L<sub>(nom)</sub> < 2.65 mg p.m./L<sub>(nom)</sub> |

**Sediment-dwelling organisms**
# Peer review of the pesticide risk assessment of the active substance trifloxystrobin

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| Group           | Test substance | Time-scale (Test type) | End point                              | Toxicity                |
|-----------------|----------------|------------------------|----------------------------------------|-------------------------|
| *C. riparius*   | a.s.           | 28 d (static)          | Development and emergence, NOEC         | 0.21 mg a.s./L (im)     |
|                 |                |                        | Emergence EC$_{10}$                    | 0.14 mg a.s./L          |
|                 |                |                        | Emergence EC$_{20}$                    | 0.32 mg a.s./L          |
| *C. riparius*   | CGA 321113     | 28 d (static)          | Development, Emergence NOEC             | 25 mg p.m./L (nom)      |

**Higher plant**

No data, not required

**Potential endocrine disrupting properties (Annex Part A, point 8.2.3)**

With regard to the endocrine disruption potential, as discussed in Section 2, it is unlikely that trifloxystrobin is an endocrine disruptor in mammals, however, no firm conclusion can be drawn regarding other non-target vertebrates.

| Fish - acute; three species | a.s. | 96 h LC$_{50}$ Mortality | 0.0398 mg a.s./L with assessment factor of 100 |
|-----------------------------|------|--------------------------|----------------------------------------------|
| *Aquatic invertebrates - acute; singlespecies* | a.s. | Geometric mean of EC$_{50}$ from one species Immobility/mortality | 0.0128 mg a.s./L**, with assessment factor of 100 |
| *Acute toxic effects on tadpoles of Xenopus laevis* | a.s. | 48h LC$_{50}$ NOEC Mortality Behavioural effects | 38.6 µg a.s./L 27.9µg a.s./L |

*endpoint not suitable for calculating the geometric mean, as agreed at the peer review experts meeting (TC 147 (06 July 2017))

**endpoint derived from the geometric mean from two *Daphnia magna* studies.

nom – mononal concentration; im – initial measured concentration; mm – mean measured concentration
### Bioconcentration in fish (Annex A, point 8.2.2.3)

| Active substance | CGA 321113 | NOA 413161 | CGA 357261 | CGA 373466 | NOA 413163 | CGA 357262 | CGA 107170 | CGA 357276 | NOA 409480 | CGA 381318 | 2-hydroxymethyl benzonitrile |
|------------------|-------------|------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------------------|
| logP<sub>O/W</sub> | 4.5 | 2.2 at pH 5 | -1.3 at pH 5 | 3.86 | 1.8 at pH 5 | -3.0 at pH 6.7 | 5.39 | 2.55 (at 25°C & pH 7 (99.6% pure)) | 4.7 | 4.2 | 0.48 at pH 6.9 | 0.8 |
| Steady-state bioconcentration factor (BCF) (total wet weight) | 431 | Not required | Data gap | Data gap | Not required | Data gap | Not required | Data gap | Data gap | Not required | Not required |
| Uptake/depuration kinetics BCF (total wet weight/normalised to 5% lipid content) | Not available | Not required | Not available | Not available | Not available | Not available | Not required | Not available | Not required | Not required | Not required |
| Annex VI Trigger for the bioconcentration factor | >1000 | >1000 | >1000 | >1000 | >1000 | >1000 | >1000 | >1000 | >1000 | >1000 | >1000 |
| Clearance time (days) (CT<sub>50</sub>) | 0.47 and 2.36 d for 0.16 and 1.6 μg a.s./L, respectively | Not required | Not available | Not required | Not available | Not required | Not available | Not available | Not available | Not required | Not required |
| (CT<sub>90</sub>) | 1.57 and 7.83 d for 0.16 and 1.6 μg a.s./L, respectively | Not required | Not available | Not required | Not available | Not required | Not available | Not required | Not available | Not required | Not required |
| Level and nature of residues (%) in organisms after the 14 day depuration phase | Active | CGA 321113 | CGA 357261 | CGA 373466 | NOA 413163 | CGA 357262 | CGA 107170 | CGA 357276 | NOA 409480 | CGA 381318 | 2-hydroxymethyl benzonitrile |
|---|---|---|---|---|---|---|---|---|---|---|---|
| <2% | Not required | Not required | Not available | Not required | Not available | Not available | Not available | Not available | Not required | Not required | Not required |

* based on total ^14C or on specific compounds
Toxicity/exposure ratios for the most sensitive aquatic organisms (Regulation (EU) N° 284/2013, Annex Part A, point 10.2)

Uses on pome fruits (apple, pear, quince)

FOCUSsw step 1-3 - TERs for trifloxystrobin for three applications of 75 g a.s./ha with a ten day spray interval (BBCH 31-89).

| Scenario | PEC global max (µg L) | fish acute | fish chronic | Aquatic invertebrates | Aquatic invertebrates prolonged | Algae | Sed. dweller prolonged | Microcosm / Mesocosm |
|----------|----------------------|------------|--------------|-----------------------|---------------------------------|-------|-----------------------|---------------------|
| Focus step 1 | 13.47 | 1.11 | 0.32 | 0.39 | 0.2 | 1.29 | 10.4 |
| Focus step 2 | North/South Europe | 7.3* | 2.05 | 0.59 | 0.71 | 0.38 | 2.39 | -- |
| Focus step 3 | D3 ditch | 5.819 | 2.58 | 0.74 | 0.89 | 0.47 | 2.99 | -- |
| | D4 pond | 0.353 | 42.49 | 12.18 | 14.73 | 7.82 | 49.29 | -- |
| | D4 stream | 6.046 | 2.48 | 0.71 | 0.86 | 0.46 | 2.87 | -- |
| | D5 pond | 0.353 | 42.49 | 12.18 | 14.73 | 7.82 | 49.3 | -- |
| | D5 stream | 6.101 | 2.46 | 0.7 | 0.85 | 0.45 | 2.85 | -- |
| | R1 pond | 0.353 | 42.49 | 12.18 | 14.73 | 7.82 | 49.3 | -- |
| | R1 stream | 4.701 | 3.19 | 0.91 | 1.11 | 0.59 | 3.7 | -- |
| | R2 stream | 6.337 | 2.37 | 0.68 | 0.82 | 0.44 | 2.74 | -- |
| | R3 stream | 6.651 | 2.26 | 0.65 | 0.78 | 0.41 | 2.61 | -- |
| | R4 stream | 4.729 | 3.17 | 0.91 | 1.1 | 0.58 | 3.7 | -- |

*single application worse case

FOCUSsw step 1-3 - TERs for trifloxystrobin for early application to pomme/stone fruit at three applications of 112.5 g a.s./ha with a ten day spray interval

| Scenario | PEC global max (µg L) | fish acute | fish chronic | Aquatic invertebrates | Aquatic invertebrates prolonged | Algae | Sed. dweller prolonged | Microcosm / Mesocosm |
|----------|----------------------|------------|--------------|-----------------------|---------------------------------|-------|-----------------------|---------------------|
| Focus step 1 | 13.47 | 1.11 | 0.32 | 0.39 | 0.2 | 1.29 | 10.4 |
| Focus step 2 | North/South Europe | 7.3* | 2.05 | 0.59 | 0.71 | 0.38 | 2.39 | -- |
| Focus step 3 | D3 ditch | 5.819 | 2.58 | 0.74 | 0.89 | 0.47 | 2.99 | -- |
| | D4 pond | 0.353 | 42.49 | 12.18 | 14.73 | 7.82 | 49.29 | -- |
| | D4 stream | 6.046 | 2.48 | 0.71 | 0.86 | 0.46 | 2.87 | -- |
| | D5 pond | 0.353 | 42.49 | 12.18 | 14.73 | 7.82 | 49.3 | -- |
| | D5 stream | 6.101 | 2.46 | 0.7 | 0.85 | 0.45 | 2.85 | -- |
| | R1 pond | 0.353 | 42.49 | 12.18 | 14.73 | 7.82 | 49.3 | -- |
| | R1 stream | 4.701 | 3.19 | 0.91 | 1.11 | 0.59 | 3.7 | -- |
| | R2 stream | 6.337 | 2.37 | 0.68 | 0.82 | 0.44 | 2.74 | -- |
| | R3 stream | 6.651 | 2.26 | 0.65 | 0.78 | 0.41 | 2.61 | -- |
| | R4 stream | 4.729 | 3.17 | 0.91 | 1.1 | 0.58 | 3.7 | -- |
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| Focus step 1 | 15 µg/L | 4.3 µg/L | 5.2 µg/L | 2.76 µg/L | 17.4 µg/L | 140 µg/L | NA µg/L |
|--------------|---------|----------|----------|-----------|-----------|---------|---------|
|              | 20.21   | 0.74     | 0.21     | 0.26      | 0.14      | 0.86    | 6.93    |
| Focus step 2 | North/south Europe | 10.95 | 1.37 | 0.7 | 0.47 | 0.25 | 1.59 | 12.8 |
| Focus step 3 | D3 ditch | 8.729 | 1.72 | 0.49 | 0.6 | 0.32 | 1.99 | -- |
|              | D4 pond  | 0.53   | 28.3    | 8.11   | 9.81     | 5.21    | 32.8   | -- |
|              | D4 stream| 9.197  | 1.63    | 0.47   | 0.57     | 0.3     | 1.89   | -- |
|              | D5 pond  | 0.53   | 28.3    | 8.11   | 9.81     | 5.21    | 32.8   | -- |
|              | D5 stream| 9.695  | 1.55    | 0.44   | 0.54     | 0.28    | 1.79   | -- |
|              | R1 pond  | 0.53   | 28.3    | 8.11   | 9.81     | 5.21    | 32.8   | -- |
|              | R1 stream| 7.094  | 2.11    | 0.61   | 0.73     | 0.39    | 2.45   | -- |
|              | R2 pond  | 9.505  | 1.58    | 0.45   | 0.55     | 0.29    | 1.83   | -- |
|              | R3 stream| 10.016 | 1.5     | 0.43   | 0.52     | 0.28    | 1.73   | -- |
|              | R4 stream| 7.093  | 2.11    | 0.61   | 0.73     | 0.39    | 2.45   | -- |

*single application worse case

FOCUSsw step 1-3 - TERs for trifloxystrobin for late application to to pomme/stone fruit at three applications of 112.5 g a.s./ha with a ten day interval

| Scenario | PEC global max (µg L) | fish acute | fish chronic | Aquatic invertebrates | Aquatic invertebrates prolonged | Algae | Sed. dweller prolonged | Microcosm / Mesocosm |
|----------|-----------------------|------------|--------------|-----------------------|--------------------------------|-------|-----------------------|----------------------|
|          | Oncorhynchus mykiss   | Oncorhynchus mykiss | Daphnia magna | Daphnia magna | Scenedesmus subspicatus | Chironomus riparius |
|          | LC5 15 µg/L           | NOEC 4.3 µg/L | EC50 5.2 µg/L | NOEC 2.76 µg/L | EC50 17.4 µg/L | EC10 140 µg/L | NOEC NA µg/L |
| Focus step 1 | 15.16 | 0.99 | 0.28 | 0.34 | 0.18 | 1.14 | 9.23 |
| Focus step 2 | North/south Europe* | 5.9 | 2.54 | 1.31 | 0.88 | 0.47 | 2.9 | 23.73 |
| Focus step 3 | D3 ditch | 4.134 | 3.63 | 1.04 | 1.26 | 0.67 | 4.2 | -- |
|              | D4 pond  | 0.185 | 81.08 | 23.24 | 28.11 | 14.92 | 94 | -- |
|              | D4 stream| 4.055 | 3.7  | 1.06 | 1.28 | 0.68 | 4.3 | -- |
|              | D5 pond  | 0.185 | 81.08 | 23.24 | 28.11 | 14.92 | 94.1 | -- |
|              | D5 stream| 4.468 | 3.36 | 0.96 | 1.16 | 0.62 | 3.9 | -- |
### Uses on vines

**FOCUSsw step 1-3 - TERs for trifloxystrobin for aquatic organisms for late application to grapes at three applications of 125 g a.s./ha with a ten day spray interval.**

| Scenario     | PEC global max (µg L) | fish acute | fish chronic | Aquatic invertebrates | Aquatic invertebrates prolonged | Algae | Sed. dweller prolonged | Microcosm / Mesocosm |
|--------------|-----------------------|------------|--------------|-----------------------|---------------------------------|-------|------------------------|----------------------|
|              |                       |            |              | Oncorhynchus mykiss   | Oncorhynchus mykiss               |       |                        |                      |
|              |                       | LC50 15 µg/L | NOEC 4.3 µg/L | EC50 5.2 µg/L | NOEC 2.76 µg/L | EC50 17.4 µg/L |                        |                      |
| Focus step 1 |                       | 13.63      | 1.1          | 0.32                  | 0.38               | 0.2             | 1.27               | 10.27                |
| Focus step 2 | North/South Europe*  | 3.35       | 4.48         | 2.3                   | 1.55               | 0.82            | 5.19              | --                   |
| Focus step 3 | D6 ditch              | 2.135      | 7.03         | 2.01                  | 2.44               | 1.29            | 8.15              | --                   |
|              | R1 pond               | 0.0762     | 196.85       | 56.43                 | 68.24             | 36.22           | 228               | --                   |
|              | R1 stream             | 1.555      | 9.65         | 2.77                  | 3.34              | 1.77            | 11.2              | --                   |
|              | R2 stream             | 2.097      | 7.15         | 2.05                  | 2.48              | 1.32            | 8.3               | --                   |
|              | R3 stream             | 2.2        | 6.82         | 1.95                  | 2.36              | 1.25            | 7.9               | --                   |
|              | R4 stream             | 1.567      | 9.57         | 2.74                  | 3.32              | 1.76            | 11.1              | --                   |

*single application worse case

### Uses on strawberries

**FOCUSsw step 1-3 - TERs for trifloxystrobin for aquatic organisms for two applications to strawberries at 125 g a.s./ha with a seven day spray interval.**

| Scenario     | PEC global max | fish acute | fish chronic | Aquatic invertebrates | Aquatic invertebrates prolonged | Algae | Sed. dweller prolonged | Microcosm / Mesocosm |
|--------------|----------------|------------|--------------|-----------------------|---------------------------------|-------|------------------------|----------------------|
|              |                |            |              | Oncorhynchus mykiss   | Oncorhynchus mykiss               |       |                        |                      |
|              |                | LC50 15 µg/L | NOEC 4.3 µg/L | EC50 5.2 µg/L | NOEC 2.76 µg/L | EC50 17.4 µg/L |                        |                      |
| Focus step 1 |                | 13.63      | 1.1          | 0.32                  | 0.38               | 0.2             | 1.27               | 10.27                |
| Focus step 2 | North/South Europe* | 3.35 | 4.48 | 2.3 | 1.55 | 0.82 | 5.19 | -- |
| Focus step 3 | D6 ditch | 2.135 | 7.03 | 2.01 | 2.44 | 1.29 | 8.15 | -- |
|              | R1 pond | 0.0762 | 196.85 | 56.43 | 68.24 | 36.22 | 228 | -- |
|              | R1 stream | 1.555 | 9.65 | 2.77 | 3.34 | 1.77 | 11.2 | -- |
|              | R2 stream | 2.097 | 7.15 | 2.05 | 2.48 | 1.32 | 8.3 | -- |
|              | R3 stream | 2.2 | 6.82 | 1.95 | 2.36 | 1.25 | 7.9 | -- |
|              | R4 stream | 1.567 | 9.57 | 2.74 | 3.32 | 1.76 | 11.1 | -- |

*single application worse case
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**FOCUS step 1**

| Oncorhynchus mykiss | Daphnia magna | Scenedesmus subspicatus | Chironomus riparius |
|---------------------|--------------|-------------------------|---------------------|
| LC50 15 µg/L        | EC50 5.2 µg/L | EC50 17.4 µg/L          | EC10 140 µg/L       |
| NOEC 4.3 µg/L       | NOEC 2.76 µg/L | NOEC 140 µg/L          | NOEC NA µg/L        |

**Focus step 2**

North/South Europe*

| Scenario | Oncorhynchus mykiss | Daphnia magna | Scenedesmus subspicatus | Chironomus riparius |
|----------|---------------------|--------------|-------------------------|---------------------|
|          | LC50 15 µg/L        | EC50 5.2 µg/L | EC50 17.4 µg/L          | EC10 140 µg/L       |
|          | NOEC 4.3 µg/L       | NOEC 2.76 µg/L | NOEC 140 µg/L          | NOEC NA µg/L        |

**Focus step 3**

D6 ditch 0.79 18.99 5.44 6.58 3.49 --
R2 stream 0.69 21.74 6.23 7.54 4.0 --
R3 stream 0.737 20.35 5.83 7.06 3.74 --
R4 stream 0.522 28.74 8.24 9.96 5.29 --

*single application worse case

**FOCUSsw step 1-3 - TERs for trifloxystrobin for aquatic organisms for application to strawberries at two applications of 150 g a.s./ha with a seven day spray interval**

| Scenario | Oncorhynchus mykiss | Daphnia magna | Scenedesmus subspicatus | Chironomus riparius |
|----------|---------------------|--------------|-------------------------|---------------------|
|          | LC50 15 µg/L        | EC50 5.2 µg/L | EC50 17.4 µg/L          | EC10 140 µg/L       |
|          | NOEC 4.3 µg/L       | NOEC 2.76 µg/L | NOEC 140 µg/L          | NOEC NA µg/L        |

**Focus step 1**

| Scenario | Oncorhynchus mykiss | Daphnia magna | Scenedesmus subspicatus | Chironomus riparius |
|----------|---------------------|--------------|-------------------------|---------------------|
|          | LC50 15 µg/L        | EC50 5.2 µg/L | EC50 17.4 µg/L          | EC10 140 µg/L       |
|          | NOEC 4.3 µg/L       | NOEC 2.76 µg/L | NOEC 140 µg/L          | NOEC NA µg/L        |

**Focus step 2**

North/South Europe*

| Scenario | Oncorhynchus mykiss | Daphnia magna | Scenedesmus subspicatus | Chironomus riparius |
|----------|---------------------|--------------|-------------------------|---------------------|
|          | LC50 15 µg/L        | EC50 5.2 µg/L | EC50 17.4 µg/L          | EC10 140 µg/L       |
|          | NOEC 4.3 µg/L       | NOEC 2.76 µg/L | NOEC 140 µg/L          | NOEC NA µg/L        |

**Focus step 3**

D6 ditch 0.948 15.82 4.54 5.49 2.91 --
R2 stream 0.841 17.84 5.11 6.18 3.28 --
R3 stream 0.885 16.95 4.86 5.88 3.12 --
R4 stream 0.628 23.89 6.85 8.28 4.39 --

*single application worse case
FOCUSsw step 4
The risk assessment presented below deviates from the usual practice. PECsw were not calculated for the Step 4, instead, the RMS calculated the percentage of mitigation required to have a low risk considering the lower available RAC. A high risk was concluded for all scenarios for which a low risk could not be concluded considering the maximum mitigation allowed accounting for 95%. For the scenarios for which a mitigation is possible, the equivalent risk mitigation measure was reported. This approach was considered acceptable by the peer review in the specific case of trifloxystrobin and the representative uses under assessment.

Derivation of the first tier regulatory acceptable concentration (RAC)

| Organism                  | Toxicity endpoint | Toxicity mg a.s/L | Trigger | RAC µg a.s/L |
|---------------------------|-------------------|-------------------|---------|--------------|
| Oncorhynchus mykiss       | LC50              | 0.015             | 100     | 0.15         |
| Oncorhynchus mykiss       | NOEC              | 0.0043            | 10      | 0.43         |
| Daphnia magna             | EC50              | 0.0052            | 100     | 0.052        |
| Daphnia magna             | NOEC              | 0.00276           | 10      | 0.276        |
| Scenedesmus subspicatus   | ErC50             | 0.0174            | 10      | 1.74         |

Mitigation required for aquatic organisms at FOCUS Step 4 using first tier RAC

| FOCUS Crop                                                                 | Scenario | 1st Tier RAC with 95% Mitigation | Actual Mitigation Required for 1st Tier RAC (%) | Equivalent Buffer Zone required for Tier 1 RAC (m) |
|---------------------------------------------------------------------------|----------|---------------------------------|-----------------------------------------------|-----------------------------------------------|
| Pomme/stone fruit trees, three applications at 75 g a.s./L and a spray interval of ten days (BBCH 31-89) | D3-Ditch | HIGH RISK                        | 99.1                                          |                                               |
|                                                                            | D4-Pond  | LOW RISK                         | 85.3                                          | 25                                            |
|                                                                            | D4-Stream| HIGH RISK                        | 99.1                                          |                                               |
|                                                                            | D5-Pond  | LOW RISK                         | 85.3                                          | 25                                            |
|                                                                            | D5-Stream| HIGH RISK                        | 99.1                                          |                                               |
|                                                                            | R1-Pond  | LOW RISK                         | 88.3                                          | 30                                            |
|                                                                            | R1-Stream| HIGH RISK                        | 98.9                                          |                                               |
|                                                                            | R2-Stream| HIGH RISK                        | 99.2                                          |                                               |
|                                                                            | R3-Stream| HIGH RISK                        | 99.2                                          |                                               |
|                                                                            | R4-Stream| HIGH RISK                        | 98.9                                          |                                               |
| Early application to pomme/stone fruit trees, three applications at         | D3-Ditch | HIGH RISK                        | 99.4                                          |                                               |
|                                                                            | D4-Pond  | LOW RISK                         | 90.2                                          | 30                                            |
| FOCUS Crop | Scenario | 1st Tier RAC with 95% Mitigation | Actual Mitigation Required for 1st Tier RAC (%) | Equivalent Buffer Zone required for Tier 1 RAC (m) |
|-----------|----------|---------------------------------|------------------------------------------|----------------------------------|
| 112.5 g a.s./L and a spray interval of ten days | D4-Stream | HIGH RISK | 99.4 | |
| | D5-Pond | LOW RISK | 90.2 | 30 |
| | D5-Stream | HIGH RISK | 99.5 | |
| | R1-Pond | LOW RISK | 90.2 | 30 |
| | R1-Stream | HIGH RISK | 99.3 | |
| | R2-Stream | HIGH RISK | 99.5 | |
| | R3-Stream | HIGH RISK | 99.5 | |
| | R4-Stream | HIGH RISK | 99.3 | |
| Late application to pomme/stone fruit trees, three applications at 112.5 g a.s./L and a spray interval of ten days | D3-Ditch | HIGH RISK | 98.7 | |
| | D4-Pond | LOW RISK | 71.9 | 25 |
| | D4-Stream | HIGH RISK | 98.7 | |
| | D5-Pond | LOW RISK | 71.9 | 25 |
| | D5-Stream | HIGH RISK | 98.8 | |
| | R1-Pond | LOW RISK | 71.9 | 25 |
| | R1-Stream | HIGH RISK | 98.4 | |
| | R2-Stream | HIGH RISK | 98.8 | |
| | R3-Stream | HIGH RISK | 98.8 | |
| | R4-Stream | HIGH RISK | 98.4 | |
| Late application to grapes, three applications at 125 g a.s./L and a spray interval of ten days | D6- Ditch | HIGH RISK | 97.6 | |
| | R1- Pond | LOW RISK | 31.8 | 10 |
| | R1- Stream | HIGH RISK | 96.7 | |
| | R2- Stream | HIGH RISK | 97.5 | |
| | R3- Stream | HIGH RISK | 97.6 | |
| | R4- Stream | HIGH RISK | 96.7 | |
| Application to strawberry, three applications at 125 g a.s./L and a spray interval of seven days | D6- Ditch | LOW RISK | 93.4 | 25 |
| | R2- Stream | LOW RISK | 92.5 | 30 |
| | R3- Stream | LOW RISK | 92.9 | 30 |
| | R4- Stream | LOW RISK | 90.0 | 25 |
| Application to strawberry, two | D6- Ditch | LOW RISK | 94.5 | 30 |
Higher tier risk assessment

Derivation of the higher tier regulatory acceptable concentration (RAC)

| Organism                              | Refinement       | Toxicity      | Toxicity | Trigger value | RAC   |
|----------------------------------------|------------------|---------------|----------|---------------|-------|
| Three species of fish                  | Geometric mean   | LC50          | 39.8     | 100           | 0.398 |
| One species of aquatic invertebrate    | Geometric mean   | EC50          | 12.8     | 100           | 0.128 |
| Daphnia magna                          | No refinement    | NOEC          | 2.76     | 10            | 0.276 |
| *Scenedesmus subspicatus*              | No refinement    | ErC50         | 17.4     | 10            | 1.74  |
Revised risk assessment
FOCUS step 4 higher tier with 95% mitigation

Mitigation for aquatic organisms at FOCUS Step 4 using a higher tier RAC

| Applicant's GAP | Scenario | Higher Tier RAC (0.128) with 95% Mitigation | Actual Mitigation Required for Higher Tier RAC (%) | Equivalent Buffer Zone required for Higher Tier RAC (0.128 µg/L) (m) |
|-----------------|---------|---------------------------------------------|--------------------------------------------------|------------------------------------------------------|
|                  | Early application to pome/stone fruit trees, three applications at 75 g a.s./L and a spray interval of ten days | | | |
|                  | D3-Ditch | HIGH RISK | 97.8 | |
|                  | D4-Pond | LOW RISK | 63.7 | 16 |
|                  | D4-Stream | HIGH RISK | 97.9 | |
|                  | D5-Pond | LOW RISK | 63.7 | 16 |
|                  | D5-Stream | HIGH RISK | 97.9 | |
|                  | R1-Pond | LOW RISK | 63.7 | 16 |
|                  | R1-Stream | HIGH RISK | 97.3 | |
|                  | R2-Stream | HIGH RISK | 98.0 | |
|                  | R3-Stream | HIGH RISK | 98.1 | |
|                  | R4-Stream | HIGH RISK | 97.3 | |
|                  | Early application to pome/stone fruit trees, three applications at 112.5 g a.s./L and a spray interval of ten days | | | |
|                  | D3-Ditch | HIGH RISK | 98.5 | |
|                  | D4-Pond | LOW RISK | 75.8 | 18 |
|                  | D4-Stream | HIGH RISK | 98.6 | |
|                  | D5-Pond | LOW RISK | 75.8 | 18 |
|                  | D5-Stream | HIGH RISK | 98.7 | |
|                  | R1-Pond | LOW RISK | 75.8 | 18 |
|                  | R1-Stream | HIGH RISK | 98.2 | |
|                  | R2-Stream | HIGH RISK | 98.7 | |
|                  | R3-Stream | HIGH RISK | 98.7 | |
|                  | R4-Stream | HIGH RISK | 98.2 | |
|                  | Late application to | | | |
|                  | D3-Ditch | HIGH RISK | 96.9 | |
| Applicant's GAP                                      | Scenario  | Higher Tier RAC (0.128) with 95% Mitigation | Actual Mitigation Required for Higher Tier RAC (%) | Equivalent Buffer Zone required for Higher Tier RAC (0.128 μg/L) (m) |
|-----------------------------------------------------|-----------|---------------------------------------------|---------------------------------------------------|------------------------------------------------------------------|
| pome/stone fruit trees, three applications at 112.5 g a.s./L and a spray interval of ten days | D4-Pond   | LOW RISK                                    | 30.8                                              | 10                                                               |
|                                                     | D4-Stream | HIGH RISK                                   | 96.8                                              |                                                                  |
|                                                     | D5-Pond   | LOW RISK                                    | 30.8                                              | 10                                                               |
|                                                     | D5-Stream | HIGH RISK                                   | 97.1                                              |                                                                  |
|                                                     | R1-Pond   | LOW RISK                                    | 30.8                                              | 10                                                               |
|                                                     | R1-Stream | HIGH RISK                                   | 96.0                                              |                                                                  |
|                                                     | R2-Stream | HIGH RISK                                   | 97.0                                              |                                                                  |
|                                                     | R3-Stream | HIGH RISK                                   | 97.1                                              |                                                                  |
|                                                     | R4-Stream | HIGH RISK                                   | 96.0                                              |                                                                  |
| Late application to grapes, three applications at 125 g a.s./L and a spray interval of ten days | D6- Ditch | LOW RISK                                    | 94.0                                              | 25                                                               |
|                                                     | R1- Pond  |                                             |                                                   |                                                                  |
|                                                     | R1- Stream| LOW RISK                                    | 91.8                                              | 25                                                               |
|                                                     | R2- Stream| LOW RISK                                    | 93.9                                              | 30                                                               |
|                                                     | R3- Stream| LOW RISK                                    | 94.2                                              | 30                                                               |
|                                                     | R4- Stream| LOW RISK                                    | 91.8                                              | 25                                                               |
| Two applications to strawberry at 125 g a.s./L and a spray interval of seven days | D6- Ditch | LOW RISK                                    | 83.8                                              | 9                                                                |
|                                                     | R2- Stream| LOW RISK                                    | 81.4                                              | 12                                                               |
|                                                     | R3- Stream| LOW RISK                                    | 82.6                                              | 12                                                               |
|                                                     | R4- Stream| LOW RISK                                    | 75.5                                              | 8                                                                |
| Two applications to strawberry at 150 g a.s./L and a spray interval of seven days | D6- Ditch | LOW RISK                                    | 86.5                                              | 12                                                               |
|                                                     | R2- Stream| LOW RISK                                    | 84.8                                              | 14                                                               |
|                                                     | R3- Stream| LOW RISK                                    | 85.5                                              | 14                                                               |
|                                                     | R4- Stream| LOW RISK                                    | 79.6                                              | 10                                                               |

**Metabolites**
### TERs for aquatic organisms at FOCUS Step 1

| Test substance | Organism            | Time scale | Toxicity end point mg p.m./L | PEC_{exp,max} Global max[µg L⁻¹] | TER | Trigger |
|----------------|---------------------|------------|------------------------------|---------------------------------|-----|---------|
| CGA 357261     | *O. mykiss*         | Acute      | 0.9                          | 26.2                            | 34.4 | 100     |
| CGA 357261     | *D. magna*          | Acute      | 0.00052*                     | 26.2                            | 0.02 | 100     |
| CGA 357261     | *S. subspicatus*    | Chronic    | 0.0174*                      | 13.6                            | 93.6 | 100     |
| CGA 107170     | *O. mykiss*         | Acute      | 13.6                         | 145.35                          | 156  | 100     |
| CGA 107170     | *D. magna*          | Acute      | 22.7                         | 145.35                          | 0.12 | 10      |
| CGA 107170     | *S. subspicatus*    | Chronic    | 0.012*                       | >200                            | 1376 | 100     |
| CGA 373466     | *O. mykiss*         | Acute      | 0.00052*                     | 0.99                            | 0.12 | 10      |
| CGA 373466     | *D. magna*          | Acute      | 0.0174*                      | >100                            | 688  | 100     |
| CGA 373466     | *S. subspicatus*    | Chronic    | 0.012*                       | >100                            | 688  | 100     |
| CGA 357262     | *O. mykiss*         | Acute      | >5.51                        | 3.33                            | 1654 | 100     |
| CGA 357262     | *D. magna*          | Acute      | >2.24                        | 3.33                            | 673  | 100     |
| CGA 357262     | *P. subcapitata*    | Chronic    | >2.65                        | 3.33                            | 795  | 10      |
| CGA 321113     | *O. mykiss*         | Acute      | >106                         | 55.96                           | 1894 | 100     |
| CGA 321113     | *D. magna*          | Acute      | 38                           | 55.96                           | 679.1| 100     |
| CGA 321113     | *P. subcapitata*    | Chronic    | >100                         | 55.96                           | 1786 | 10      |
| CGA 321113     | *C. riparius*       | Chronic    | 19.78                        | 55.96                           | 353.8| 10      |
| CGA 357276     | *O. mykiss*         | Acute      | 0.0015*                      | 0.17                            | 8.8  | 100     |
| CGA 357276     | *D. magna*          | Acute      | 0.514                        | 0.17                            | 3023 | 100     |
| CGA 357276     | *P. subcapitata*    | Chronic    | >5.88                        | 0.17                            | 34588| 10      |
| NOA 413161     | *O. mykiss*         | Acute      | >100                         | 145.35                          | 688  | 100     |
| NOA 413161     | *D. magna*          | Acute      | >100                         | 145.35                          | 688  | 100     |
| NOA 413161     | *P. subcapitata*    | Chronic    | >100                         | 145.35                          | 688  | 10      |
| NOA 413163     | *O. mykiss*         | Acute      | >100                         | 145.35                          | 688  | 100     |
| NOA 413163     | *D. magna*          | Acute      | >100                         | 145.35                          | 688  | 10      |
| NOA 413163     | *P. subcapitata*    | Chronic    | >100                         | 145.35                          | 688  | 100     |
| NOA 409480     | *O. mykiss*         | Acute      | 0.0015*                      | 10.5                            | 0.14 | 100     |
| NOA 409480     | *D. magna*          | Acute      | 2.25                         | 10.5                            | 214.3| 100     |
| NOA 409480     | *P. subcapitata*    | Chronic    | >2.02                        | 10.5                            | 192.4| 10      |

*Assuming 10 times higher toxicity than the parent compound

### TERs for aquatic organisms at FOCUS Step 2 for individual metabolites
| Test substance | Organism           | Time scale | Toxicity end point (mg p.m./L) | PECsw, [µg L⁻¹] | TER  | Trigger |
|----------------|--------------------|------------|-------------------------------|-----------------|------|---------|
| CGA 357261     | *Oncorhynchus mykiss* | Acute      | 0.9                           | 7.73            | 116  | 100     |
| CGA 357261     | *Daphnia magna*     | Acute      | 0.00052*                      | 7.73            | 0.07 | 100     |
| CGA 357261     | *S. subspicatus*     | Chronic    | 0.0174*                       | 7.73            | 2.3  | 10      |
| CGA 107170     | *Oncorhynchus mykiss* | Acute      | 13.6                          | 53.43           | 255  | 100     |
| CGA 107170     | *S. subspicatus*     | Chronic    | 0.0174*                       | 54.43           | 0.31 | 10      |
| CGA 373466     | *S. subspicatus*     | Chronic    | 0.0174*                       | 54.43           | 0.31 | 10      |
| NOA 409480     | *D. magna*          | Acute      | 2.25                          | 2.49            | 904  | 100     |
| NOA 409480     | *Oncorhynchus mykiss* | Acute      | 0.0015*                       | 2.49            | 6.02 | 100     |
| CGA 357276     | *O. mykiss*         | Acute      | 0.0015*                       | 0.06            | 25   | 100     |

*Assuming 10 times higher toxicity than the parent compound*
Effects on bees (Regulation (EU) N° 283/2013, Annex Part A, point 8.3.1 and Regulation (EU) N° 284/2013 Annex Part A, point 10.3.1)

| Species                        | Test substance         | Time scale/type of endpoint | End point          | Toxicity                  |
|--------------------------------|------------------------|-----------------------------|--------------------|---------------------------|
| *Apis mellifera* a.s.          | Acute (48h)            | Oral toxicity (LD<sub>50</sub>) | > 110 µg a.s./bee   |
| *Apis mellifera* a.s.          | Acute (48h)            | Oral toxicity (LD<sub>50</sub>) | > 200 µg a.s./bee   |
| *Apis mellifera* Flint (preparation) | Acute (48h)            | Oral toxicity (LD<sub>50</sub>) | > 187 µg prep./bee (> 95 µg a.s./bee) |
| *Apis mellifera* Trifloxystrobin WG 50 W (preparation) | Acute (48h)            | Oral toxicity (LD<sub>50</sub>) | > 216 µg prep./bee (> 107.8 µg a.s./bee) |
| *Apis mellifera* a.s.          | Acute (48h)            | Contact toxicity (LD<sub>50</sub>) | > 100 µg a.s./bee   |
| *Apis mellifera* a.s.          | Acute (48h)            | Contact toxicity (LD<sub>50</sub>) | > 200 µg a.s./bee   |
| *Apis mellifera* Flint (preparation) | Acute (48h)            | Contact toxicity (LD<sub>50</sub>) | > 200 µg prep./bee (> 102 µg a.s./bee) |
| *Apis mellifera* Trifloxystrobin WG 50 W (preparation) | Acute (48h)            | Contact toxicity (LD<sub>50</sub>) | > 201 µg prep./bee (> 100 µg a.s./bee) |
| *Apis mellifera* Preparation   | Chronic                | 10 d-LC50                   | > 4.9 µg a.s./bee/day* |
| *Apis mellifera* -             | Bee brood development  | NOEClarvae                  | Data gap            |
| *Apis mellifera* -             | Sublethal effects on honeybees (i.e. HPG study) | Data gap                  | Data gap            |

*Potential for accumulative toxicity: no data*

Potential for accumulative toxicity: no data

High tier studies (a semi-field study performed in line with OECD 75 and EPPO 170 and a brood feeding test in line with Oomen et al., 1992) were provided. On the basis of these studies the RMS concluded a low risk to honeybees for the representative uses of trifloxystrobin. It is, however, noted that these kind of studies are considered of limited use according to EFSA (2013).

**Bee brood feeding test**

A bee brood test was conducted in order to assess the effect of Trifloxystrobin WG 50 to honeybee brood. An untreated control and a toxic reference were included in the study. Three bee colonies were used per control, toxic reference and treatment group. Test item: 0.151 g test item (Trifloxystrobin WG 50 W), dissolved in 1 L commercial ready-to-use syrup (Apiinvert) per colony, equivalent to an active substance concentration of 0.075 g trifloxystrobin a.s./L. The egg termination rate in the test item treatment was higher (25.3%, 26.7% and 69.3%; average 40.4%) than that in the controls (6.7%, 10.7%, 29.3%; average 15.6%). This was not statistically significant, most likely due to high variation in both the test item treatment and controls. It cannot be assessed as to whether the egg mortality of 29.3% in one of the control replicates or the 69.3% in one of the test item treatment replicate is an outlier. Subsequently, a treatment-related effect cannot be confirmed nor excluded. Also for young larvae termination rate high variation between replicates were reported (control: 8.0, 12.7 and 76.7%; test item treatment: 3.3, 9.3 and 62%).

**Semi-field test (Cage and tunnel test)**

Trifloxystrobin WG 50 W: Effects on honey bee brood (*Apis mellifera* L.) under semi-field conditions - Tunnel test

To assess the potential effects of 'Trifloxystrobin WG 50 W' on honey bee colonies including brood
development, 401 g product in 400 L tap water/ha (corresponding to 200 g trifloxystrobin a.s./ha) for the test item, tap water for the control and Insegar for the reference item were applied to a highly bee-attractive crop in full bloom (i.e. Phacelia tanacetifolia) under semi-field (tunnel) conditions during bee-flight. No adverse effects on pupae or worker mortality, foraging activity, behaviour, nectar- and pollen storage and queen survival were observed. No effects on colony development, colony strength or bee brood were observed. The effects of the reference item Insegar on the bee brood were observed to be typical for the a.s. fenoxycarb in terms of occurrence and extent.

RMS comment
The study was performed in line with guideline OECD 75 and EPPO 170; all validity criteria were met. The study was performed under GLP compliance.

No treatment related effects were evident on mortality of worker bees, mortality of larvae/pupae, or the foraging activity of worker bees. A statistically non-significant increase in mean brood termination rate was noted. Further investigation of the data indicated that a large degree of variability was evident in the negative control and the treatment hives. The control hives exhibited termination rates from 4% to 32% whereas in the treatment hives, the termination rate was 12.4% to 47.6%. There were no discernible patterns of increased rate within the treatment replicates over the course of the study and therefore the RMS considers that the non-significant increase is not treatment related.

Statistically significant effects were evident in the positive control, indicating that the test system is sensitive to toxic insult. Therefore, the RMS considers that trifloxystrobin has no apparent detrimental effects on bee brood survival/development at the field rate of 200 g a.s./ha.

Field tests
None submitted

Risk assessment

| Species       | Test substance                  | Risk quotient | HQ/ETR | Trigger |
|---------------|---------------------------------|---------------|--------|---------|
| Apis mellifera| a.s.                            | HQoral        | <0.8   | 50      |
| Apis mellifera| Trifloxystrobin WG 50 W (preparation) | HQoral        | <1.4   | 50      |
| Apis mellifera| a.s.                            | HQcontact     | <0.8   | 50      |
| Apis mellifera| Trifloxystrobin WG 50 W (preparation) | HQcontact     | <1.5   | 50      |

In the absence of a suitable risk assessment scheme, a data gap was identified for a risk assessment for honeybees for trifloxystrobin and its pertinent metabolites in pollen and nectar in line with EFSA (2013)

**Effects on other arthropod species (Regulation (EU) N° 283/2013, Annex Part A, point 8.3.2 and Regulation (EU) N° 284/2013 Annex Part A, point 10.3.2)**

**Laboratory tests with standard sensitive species**

| Species              | Test Substance                  | End point         | Toxicity          |
|----------------------|---------------------------------|-------------------|-------------------|
| Typhlodromus pyri    | ‘Flint WG 50’                   | Mortality, LR₅₀   | >375 g a.s./ha    |
|                      |                                 | Reproduction, ER₅₀| >375 g a.s./ha    |
| Aphidius colemani    | ‘Flint WG 50’                   | Mortality, LR₅₀   | >500g a.s./ha     |
|                      |                                 | Reproduction, ER₅₀| >500g a.s./ha     |
| Aphidius rhopalosiphi | ‘AE C656948 (Fluopyram) & Trifloxystrobin SC 250 + 250 g/L’ | Mortality, LR₅₀ | >787g a.s./ha*    |
|                      |                                 | Reproduction, ER₅₀| >787g a.s./ha*    |

Additional species
| Species                      | Test Substance | End point         | Toxicity          |
|-----------------------------|----------------|-------------------|-------------------|
| *Coccinella septempunctata* | ‘Flint WG 50’  | Mortality, LR<sub>50</sub> | >500 g a.s./ha    |
|                             |                | Reproduction, ER<sub>50</sub> | Interrupted dose response: >50 % effects at 250 g a.s./ha, study repeated<sup>8</sup> < 50 % effects. < 50 % effects at 500 g a.s./ha<sup>#</sup> |
| *Orius insidiosus*          | ‘Flint WG 50’  | Mortality, LR<sub>50</sub> | <500 g a.s./ha    |
|                             |                | Reproduction, ER<sub>50</sub> | <500 g a.s./ha    |
| *Orius laevigatus*          | ‘Flint WG 50’  | Mortality, LR<sub>50</sub> | 21.2 g a.s./ha    |
|                             |                | Reproduction, ER<sub>50</sub> | >12.5 g a.s./ha    |
| *Poecilus cupreus*          | ‘Flint WG 50’  | Mortality, LR<sub>50</sub> | >500 g a.s./ha    |
|                             |                | Reproduction, ER<sub>50</sub> | >500 g a.s./ha    |

<sup>#</sup> Repeat studies were conducted for both 250 and 500 g a.s./ha. After detailed consideration (see volume 3 CP dossier section B.9.6.2) the reproductive endpoint used in risk assessment is < 50 % effects at 500 g a.s./ha.

<sup>8</sup> Mixed active formulation; endpoint expressed as content of trifloxystrobin.

<sup>**</sup> Study conducted according to tier 1 test design. However, following peer review meeting (TC 147) concerns were raised as the standard tier 1 species i.e. *Aphidius rhopalosiphi* was not tested. Therefore it was agreed this study would be treated as a tier II study in the risk assessment.

**Extended laboratory tests, aged residue tests**

| Species                      | Life stage | Test substance, substrate | Time scale | Dose (g a.s./ha)<sup>1,2,3</sup> | End point            | % effect<sup>4,5,3</sup> | ER<sub>50</sub> |
|-----------------------------|------------|---------------------------|------------|---------------------------------|----------------------|-----------------------|----------------|
| *Typhlodromus pyri*         | Nymphs     | ‘Flint WG 50'             | Extended study treated leaf discs for 7 days; 7 days fecundity phase | 500                | Mortality, Reproduction | < 50 % effects        | >500             |
| *Orius laevigatus*          | *Orius* nymphs | ‘Flint WG 50'             | Aged residues on excised bean leaves 0, 14 and 30 DAT. | 6 x 15.1 & 6 x 189 | Mortality reproduction | DAT 14: 42, 14: 12, 14: 51 | N/A               |
Species | Life stage | Test substance, substrate | Time scale | Dose (g a.s./ha) | End point | % effect[^3] | ER[^5] 6 |
|--------|------------|--------------------------|------------|-----------------|-----------|-------------|-----------|
| *Coccinella septempunctata* | Second instar larvae | ‘Flint WG 50’ | Aged residues on potted grapevine plants 0, 14 and 28 DAT | 3 x 38 | Mortality | DAT 0: 13.0 | N/A |
|       |            |                          |            | 3 x 192         | Reproduction | DAT 14: 4.6 | |
|       |            |                          |            |                 | Mortality    | DAT 28: -6.5 | |
|       |            |                          |            |                 | Reproduction | DAT 0: 70.1 | |
|       |            |                          |            |                 |             | DAT 14: 29.0 | |
|       |            |                          |            |                 |             | DAT 28: -16.8 | |
|       |            |                          |            |                 |             | DAT 0: 13.0 | |
|       |            |                          |            |                 |             | DAT 14: 22.7 | |
|       |            |                          |            |                 |             | DAT 28: 0 | |
|       |            |                          |            |                 |             | DAT 0: 44.2 | |
|       |            |                          |            |                 |             | DAT 14: 44.2 | |
|       |            |                          |            |                 |             | DAT 28: -27.4 | |

[^1]: doses were for initial and aged residues
[^2]: units relate to g active substance/ha
[^3]: Control mortality was 82% in initial residue study (DAT 0) hence results were not valid and have been excluded
[^4]: Positive percentages indicate adverse effects
[^5]: Based on corrected mortality according to abbott 1924
[^6]: Based on corrected mortality and reproduction for DAT 14 and 30 Negative value indicates an increase compared with the control.

**Risk assessment** for vineyards at 125 g a.s./ha x 3 applications based on aged residue test

| Species            | ER[^2] (g a.s./ha) | In-field rate | Off-field rate[^1] |
|--------------------|-------------------|--------------|-------------------|
| *Orius laevigatus* | >189 x 6          | 125 x 3      | 20.05 x 3         |

[^1]: Worse case drift rate at 3 metres and late season and 3D.
[^2]: six applications made after DAT 14 and 30 using corrected mortality and reproduction.

**Semi-field tests**

Additional data were supplied using semi-field aged residue studies with other formulations of Trifloxystrobin however as the ‘Flint WG 50’ formulation has been assessed these studies were not used in the risk assessment.

**Field studies**

A field study testing ‘Flint WG50’ and its effects on predatory mites (*T pyri* and *K aberrans*) was submitted. Briefly the study assessed 6 applications (50, 76, 101, 126, 151 and 189 g a.s./ha) with an 8-13 day interval this was described as the max in-field rate. The study then assessed 6 applications at 7.5 % of the max in-field rate. Applications were made in a vineyard and samples taken 5 days before treatment until 56 days after the last treatment. The mite density was assessed and there was a maximum of 34.3 and 36.5 % reduction compared to the control at the maximum and 7.5 % field rates respectively.

**Additional specific test**

None submitted.

**Effects on non-target soil meso- and macro fauna; effects on soil nitrogen transformation (Regulation (EU) N° 283/2013, Annex Part A, points 8.4, 8.5, and Regulation (EU) N° 284/2013 Annex Part A, points 10.4, 10.5)**

| Test organism | Test substance | Application method of test a.s./OM[^1] | Time scale | End point | Toxicity |
|---------------|----------------|----------------------------------------|------------|-----------|----------|
| Earthworms    |                |                                        |            |           |          |
| Test organism | Test substance | Application method of test a.s./ OM1 | Time scale | End point | Toxicity |
|---------------|----------------|-------------------------------------|------------|-----------|----------|
| *Eisenia fetida* | Trifloxystrobin a.s. | Quartz sand / 5% peat Mixed into soil | Chronic | Growth, reproduction, | NOECa 3.5mg a.s./kg d.w.soil |
| *Eisenia fetida* | ‘Flint’ preparation | Quartz sand / 10% peat Mixed into soil | Chronic | Growth, reproduction, | NOECa 14mg a.s./kg d.w.soil |
| *Eisenia fetida* | CGA 357261 | Quartz sand / 5% peat Mixed into soil | Chronic | Growth, reproduction, | NOECa 50mg metabolite/kg d.w.soil |
| *Eisenia fetida* | CGA 321113 | Quartz sand / 10% peat Mixed into soil | Chronic | Growth, reproduction, | NOECa 50mg metabolite/kg d.w.soil |
| *Eisenia fetida* | CGA 373466 | Quartz sand / 5% peat Mixed into soil | Chronic | Growth, reproduction, | NOEC 100mg metabolite/kg d.w.soil |
| *Eisenia fetida* | CGA 381318 | Quartz sand / 10% peat Mixed into soil | Chronic | Growth, reproduction, | NOEC 100mg metabolite/kg d.w.soil |
| *Eisenia fetida* | NOA 413161 | Quartz sand / 5% peat | Chronic | Growth, reproduction, | NOEC 100mg metabolite/kg d.w.soil |
| *Eisenia fetida* | NOA 413163 | Quartz sand / 105% peat Mixed into soil | Chronic | Growth, reproduction, | NOEC 100mg metabolite/kg d.w.soil |
| *Eisenia fetida* | CGA 357276 | Quartz sand / 5% peat Mixed into soil | Chronic | Growth, reproduction, | NOECa 25 mg metabolite /kg d.w.soil EC50 58.9 mg metabolite/kg d.w. soil EC20 >90 mg metabolite/kg d.w. soil |
| *Eisenia fetida* | NOA 409480 | Quartz sand / 5% peat Mixed into soil | Chronic | Growth, reproduction, | NOECa 50mg metabolite /kg d.w.soil |

Other soil macroorganisms
| Test organism | Test substance | Application method of test a.s./ OM | Time scale | End point | Toxicity |
|---------------|----------------|-----------------------------------|------------|-----------|----------|
| Folsomia candida | ‘Flint’ preparation | Quartz sand / 5% peat Mixed into soil | Chronic | Mortality, Reproduction | NOECa 249mg a.s./kg d.w.soil |
| Folsomia candida | CGA 357261 | Quartz sand / 5% peat Mixed into soil | Chronic | Mortality, Reproduction | NOECa 50mg metabolite /kg d.w.soil |
| Folsomia candida | CGA 321113 | Quartz sand / 10% peat Mixed into soil | Chronic | Mortality, Reproduction | NOECa 50 mg metabolite/kg d.w.soil EC10 207 mg metabolite/kg d.w. soil EC20 382 mg metabolite/kg d.w. soil |
| Folsomia candida | CGA 373466 | Quartz sand / 5% peat Mixed into soil | Chronic | Mortality, Reproduction | NOEC 100mg metabolite /kg d.w.soil |
| Folsomia candida | NOA 413161 | Quartz sand / 10% peat Mixed into soil | Chronic | Mortality, Reproduction | NOEC 10mg metabolite/kg d.w.soil |
| Folsomia candida | NOA 413163 | Quartz sand / 5% peat Mixed into soil | Chronic | Mortality, Reproduction | NOEC 100mg metabolite/kg d.w.soil |
| Folsomia candida | CGA 35726 | Quartz sand / 5% peat Mixed into soil | Chronic | Mortality, Reproduction | NOECa 50mg metabolite/kg d.w.soil |
| Hypoaspis aculeifer | ‘Flint’ preparation | Quartz sand / 5% peat Mixed into soil | Chronic | Mortality, Reproduction | NOECa 249mg a.s./kg d.w.soil |
| Hypoaspis aculeifer | CGA 357261 | Quartz sand / 5% peat Mixed into soil | Chronic | Mortality, Reproduction | NOECa 50mg metabolite/kg d.w.soil |
| Hypoaspis aculeifer | CGA 321113 | Quartz sand / 5% peat Mixed into soil | Chronic | Mortality, Reproduction | NOECa 50mg metabolite /kg d.w.soil |
| Test organism          | Test substance | Application method of test a.s./OM | Time scale | End point               | Toxicity                                |
|-----------------------|----------------|-----------------------------------|------------|-------------------------|-----------------------------------------|
| Hypoaspis aculeifer   | CGA 373466     | Quartz sand / 5% peat Mixed into soil | Chronic   | Mortality, Reproduction | NOEC 100mg metabolite /kg d.w.soil      |
| Hypoaspis aculeifer   | NOA 413161     | Quartz sand / 5% peat Mixed into soil | Chronic   | Mortality, Reproduction | NOEC 100mg metabolite /kg d.w.soil      |
| Hypoaspis aculeifer   | CGA 357276     | Quartz sand / 5% peat Mixed into soil | Chronic   | Mortality, Reproduction | NOEC\(^a\) 50mg metabolite /kg d.w.soil |

\(^a\)To indicate whether the test substance was oversprayed/to indicate the organic content of the test soil (e.g. 5 \% or 10 \%).

\(^a\) corrected by factor of 2 due to lipophilic substance (log Pow > 2)

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Higher tier testing (e.g. modelling or field studies)
No data

| Nitrogen transformation | Test substance | Time scale | Endpoint | PECsoil max (mg/kg) | Low risk? |
|-------------------------|----------------|------------|----------|---------------------|-----------|
| Trifloxystrobin         | 28 day         | <25% effect at day 28 at 13.33mg a.s./kg d.w.soil | 0.5       | Yes                 |
| Trifloxystrobin WG 50   | 28 day         | <25% effect at day 28 at 2.67 mg product/kg d.w.soil (equivalent to 1.34 mg a.s./kg d.w.soil) | 0.5 mg a.s./kg | Yes                 |
| CGA 357276              | N/A            | <25% effect at 1.33mg metabolite/kg d.w.soil\(^a\) | 0.022     | Yes                 |
| NOA 413163              | N/A            | <25% effect at 1.33mg metabolite/kg d.w.soil\(^a\) | 0.5       | Yes                 |
| NOA 409480              | N/A            | <25% effect at 1.33mg metabolite/kg d.w.soil\(^a\) | 0.036     | Yes                 |
| CGA 381318              | N/A            | <25% effect at 1.33mg metabolite/kg d.w.soil\(^a\) | 0.5       | Yes                 |
| CGA 357261              | 42 day         | <25% effect at day 42 at 3.35mg metabolite/kg d.w.soil | 0.0042    | Yes                 |
| CGA 321113              | 28 day         | <25% effect at day 28 at 3.26mg metabolite/kg d.w.soil | 0.5       | Yes                 |
| CGA 373466              | 28 day         | <25% effect at day 28 at 3.47mg metabolite/kg d.w.soil | 0.5       | Yes                 |
**Toxicity/exposure ratios for soil organisms**

Based on worst case GAP vineyards at 125 g a.s./ha x 3 applications

| Test organism         | Test substance | Time scale | Soil PEC\(^1\) | TER | Trigger |
|-----------------------|----------------|------------|-----------------|-----|---------|
| *Eisenia fetida*      | Trifloxystrobin| Chronic    | 0.5             | 28  | 5       |
| *Eisenia fetida*      | ‘Flint WG 50’ | Chronic    | 0.5             | 7   | 5       |
| *Eisenia fetida*      | CGA 357261    | Chronic    | 0.0042          | 11905 | 5     |
| *Eisenia fetida*      | CGA 321113    | Chronic    | 0.5             | 100 | 5       |
| *Eisenia fetida*      | CGA 373466    | Chronic    | 0.5             | 200 | 5       |
| *Eisenia fetida*      | CGA 381318    | Chronic    | 0.5             | 200 | 5       |
| *Eisenia fetida*      | NOA 413161    | Chronic    | 0.5             | 200 | 5       |
| *Eisenia fetida*      | NOA 413163    | Chronic    | 0.5             | 200 | 5       |
| *Eisenia fetida*      | CGA 357276    | Chronic    | 0.022           | 1136 | 5     |
| *Eisenia fetida*      | NOA 409480    | Chronic    | 0.036           | 1389 | 5     |
| *Folsomia candida*    | ‘Flint WG 50’ | Chronic    | 0.5             | 498 | 5       |
| *Folsomia candida*    | CGA 357261    | Chronic    | 0.0042          | 11905 | 5     |
| *Folsomia candida*    | CGA 321113    | Chronic    | 0.5             | 100 | 5       |
| *Folsomia candida*    | CGA 373466    | Chronic    | 0.5             | 200 | 5       |
| *Folsomia candida*    | NOA 413161    | Chronic    | 0.5             | 20  | 5       |
| *Folsomia candida*    | NOA 409480    | Chronic    | 0.036           | 692* | 5     |
| *Folsomia candida*    | CGA 381318    | Chronic    | 0.5             | 50* | 5       |
| *Folsomia candida*    | NOA 413163    | Chronic    | 0.5             | 200 | 5       |
| *Folsomia candida*    | CGA 357276    | Chronic    | 0.022           | 2273 | 5     |
| *Hypoaspis aculeifer*| ‘Flint WG 50’ | Chronic    | 0.5             | 498 | 5       |
| *Hypoaspis aculeifer*| CGA 357261    | Chronic    | 0.0042          | 11905 | 5     |
| *Hypoaspis aculeifer*| CGA 321113    | Chronic    | 0.5             | 100 | 5       |
| *Hypoaspis aculeifer*| CGA 373466    | Chronic    | 0.5             | 200 | 5       |
| *Hypoaspis aculeifer*| NOA 413161    | Chronic    | 0.5             | 200 | 5       |
| *Hypoaspis aculeifer*| NOA 409480    | Chronic    | 0.036           | 692* | 5     |
| *Hypoaspis aculeifer*| CGA 381318    | Chronic    | 0.5             | 50* | 5       |
| *Hypoaspis aculeifer*| NOA 413163    | Chronic    | 0.5             | 50* | 5       |
| *Hypoaspis aculeifer*| CGA 357276    | Chronic    | 0.022           | 2273 | 5     |

\(^1\) Worst case initial PEC soil was used

\(^*\) Due to lack of data metabolite assumed to be ten times more toxic than parent.
Effects on terrestrial non target higher plants (Regulation (EU) N° 283/2013, Annex Part A, point 8.6 and Regulation (EU) N° 284/2013 Annex Part A, point 10.6)

| Species                                                                 | Test substance     | ER_{50} (g/ha)\(^2\) vegetative vigour | ER_{50} (g/ha)\(^2\) emergence | Exposure\(^1\) (g/ha)\(^2\) <50% effect at maximum application rate | Trigger                                      |
|------------------------------------------------------------------------|--------------------|----------------------------------------|---------------------------------|-------------------------------------------------|---------------------------------------------|
| Brassica oleracea, Daucus carota, Cucumis sativus, Lactuca sativa, Glycine max, Lycopersicon esculentum, Zea mays, Avena sativa, Lolium perenne Allium cepa | ‘Flint WG 50’      | >270 a.s.                               | >270 a.s.                        | 150                                             | Yes                                         |
| Terrestrial non-target plants; 6 species: maize, green peas, oilseed rape, sugar beet, sunflower and wheat | ‘Flint WG 50’      | >250 a.s.                               | 2000 a.s. pre emergence > 250 a.s. post emergence | 150                                             | Yes                                         |

Extended laboratory studies: None submitted.
Semi-field and field test: None submitted.

\(^1\) exposure based on maximum application rate (screening step).

\(^2\) units are expressed in terms of active substance.

Effects on biological methods for sewage treatment (Regulation (EU) N° 283/2013, Annex Part A, point 8.8)

| Test type/organism | End point |
|-------------------|-----------|
| Activated sludge  | EC_{50} >100 mg a.s./L |
| Pseudomonas sp    | No data   |

Monitoring data (Regulation (EU) N° 283/2013, Annex Part A, point 8.9 and Regulation (EU) N° 284/2013, Annex Part A, point 10.8)

Available monitoring data concerning adverse effect of the a.s.
No data
Available monitoring data concerning effect of the PPP.
No data

Definition of the residue for monitoring (Regulation (EU) N° 283/2013, Annex Part A, point 7.4.2)
Ecotoxicologically relevant compounds\(^1\)

| Compartiment         | Trifloxystrobin \(^2\) |
|----------------------|------------------------|
| Soil                 | Trifloxystrobin        |
| Groundwater          | Trifloxystrobin, open regarding CGA 357261, CGA 373466, NOA 409480, CGA 357276, CGA 381318 |
| Surface water        | Trifloxystrobin, open regarding CGA 357261, CGA 107170, CGA 373466, NOA 409480, CGA 357276, CGA 381318 |
| Sediment             | Trifloxystrobin, open regarding CGA 321113 |

\(^1\) metabolites are considered relevant when, based on the risk assessment, they pose a risk comparable or higher than the parent

Classification and labelling with regard to ecotoxicological data (Regulation (EU) N° 283/2013, Annex Part A, Section 10)

Substance

Trifloxystrobin
Harmonised classification according to Regulation (EC) No 1272/2008 and its Adaptations to Technical Process [Table 3.1 of Annex VI of Regulation (EC) No 1272/2008 as amended]⁶:

Peer review proposal⁷ for harmonised classification according to Regulation (EC) No 1272/2008:

| Classification       | Code   |
|----------------------|--------|
| Aquatic Acute 1      | H400   |
| Aquatic Chronic 1    | H410   |

The LC/EC₅₀ values for fish, aquatic invertebrates and algae are <1.0 mg trifloxystrobin/L. In addition, the NOEC values for fish and aquatic invertebrates are <0.1 mg trifloxystrobin/L and it is not readily biodegradable. Trifloxystrobin should therefore be classified as Acute category 1 and Chronic category 1.

The M-factor for acute toxicity is 100, based on the acute toxicity endpoint for aquatic invertebrates (5.2 µg a.s./L).

The M-factor for chronic toxicity is 10, based on the chronic toxicity endpoint for aquatic invertebrates (2.76 µg a.s./L).

‘Very toxic to aquatic life with long lasting effects’ (H410).

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⁶ Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. OJ L 353, 31.12.2008, 1-1355.

⁷ It should be noted that harmonised classification and labelling is formally proposed and decided in accordance with Regulation (EC) No 1272/2008.