Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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of 4–5%, the company’s Charge Enhancer additive helps the meltblown material to enhance and retain the imparted charge, it reports. ‘Without the Charge Enhancer, the mask media would struggle to retain a filtration efficiency of ≥95%, claims Techmer PM’s VP of technology Bhushan Deshpande. Alongside the use of charge-enhancing technology, variables such as the structure of the fabric and the process conditions are also important in determining the efficacy of meltblown nonwovens used in mask media.

Existing manufacturers of high-quality face masks have ramped up production in response to the booming demand induced by the coronavirus pandemic, while additional companies have been motivated to re-tool to use their meltblown capacity to manufacture these products, Techmer PM observes. Academic and industry laboratories that normally devote their nonwovens equipment to pilot projects or trials have also modified their processes to manufacture commercial mask media, according to the company.

To complement its existing Charge Enhancer additive, Techmer PM reveals that it is testing new technology designed to provide more-permanent charge-enhancing effects than currently available; the technology will be ‘well suited’ for the development of reusable masks, according to Deshpande. The Clinton, TN-based company also offers a number of other solutions for the medical nonwovens sector in addition to its charge-enhancing masterbatch, including irradiation stabilizers, hydrophobics, softeners and Techsurf® hydrophilics.

More information: www.techmerpm.com

Silvergate adds colour to 30% recycled content masterbatch range

British independent masterbatch producer Silvergate Plastics reports that its 30% recycled content masterbatch technology is now available across the colour spectrum. The technology was originally developed for a ‘prime performance’ white masterbatch, which was introduced last year and reportedly behaves ‘like a virgin product’ despite the recycled content [ADPO, February 2020, pp. 4–5]. The extension to colour masterbatches is in response to strong interest from customers, the company says.

Silvergate has developed its recycled content range to support plastic packaging producers who will be directly affected by the UK government’s pending plastic packaging tax, which will come into effect in April 2022; according to an update published in March this year following a consultation period, the new tax will apply to plastic packaging manufactured in, or imported into, the UK that contains less than 30% recycled plastics.

Commenting on the technical criteria behind the creation of the new range, Silvergate’s technical manager Mark Loughlin reveals that the company set out ‘a strict objective’ in order to ensure that it developed the best possible solution. ‘We wanted to develop a prime performance solution so neither the properties of the masterbatch nor moulding polymer would be affected by the use of recycled raw materials’, he says. The company therefore identified high-quality recyclates and developed ‘a robust formulation’ to make certain that the performance of the new masterbatch range matches that of virgin materials, he reports.

The reason for Silvergate developing a white masterbatch with virgin-like performance as the initial product in the 30% recycled content range was to ensure that the company could fulfil requests for commodity and batch orders, Loughlin explains. Silvergate was then able to expand quickly into other colours because ‘customers have taken such an interest’ in the new range, he adds. The company says it is able to incorporate recyclates successfully into the formulation of any colour the customer requests as it is not limited to ‘specific colour collections’.

Silvergate has also recently launched a Natural Colour Collection featuring ‘muted tones and heritage hues’, which are reportedly ‘on trend’ with interior designers and online influencers at present. The colour palettes are designed to ‘complement cool greys and classic whites’ to give producers of homewares and other consumer products ‘a convenient way to select colours’, according to the company’s sales executive and consumer goods specialist Emma Cank, who has been working closely with colour match technicians to develop the range. ‘The idea of this collection is to offer a convenient way for processors to get new products to market quickly and easily’, she says. Although it is a standard colour collection, it can be adapted as desired to suit individual needs, for example with a range of natural effects such as those that mimic the texture and appearance of paper and wood, or with glitter effects, Silvergate says. Specific shades can also be developed based on colours in the range. Earlier this year, the company also introduced a Spring colour collection comprising pastel and fresh hues.
‘Whilst Silvergate is known for developing bespoke colours and working directly with customers in our onsite colour match studio, we are also aware that many customers need colour choices very quickly’, comments Cank. In compiling the collections, the company says it has undertaken ‘a lot of the investigative work’ and can offer a practical way for time-stretched manufacturers to tint their products using a palette of popular colours.

Cank also reveals that orders for Silvergate’s commodity masterbatches have soared due to the COVID-19 pandemic but says that the company remains ‘very much focused on developing sustainable plastics’. The coronavirus crisis has seen Silvergate ‘inundated with orders’ from the medical device and equipment market, as well as from customers that manufacture packaging for cleaning, sanitizing and personal care products. The company reports that it has been ‘operating around the clock’ to support plastics manufacturers in these sectors. Silvergate comments that it was able to respond rapidly to the ‘unexpected changes in the marketplace’ wrought by the COVID-19 pandemic thanks to its ‘lean manufacturing principles and efficient operating practices’. At the onset of the crisis, the company reconfigured its manufacturing facility to ensure the safety of its employees and moved its sales and administrative teams to homeworking.

More information: www.silvergate.co.uk

Shepherd Color’s YInMn Blue gains full EPA approval

Inorganic pigment specialist Shepherd Color, headquartered in Cincinnati, OH, USA, reports that its ‘YInMn Blue’ pigment has been added to the US Environmental Protection Agency’s Toxic Substances Control Act (TSCA) registry. The innovative pigment, which the company licenses from Oregon State University (OSU) [ADPO, July 2015, p. 1], is therefore now fully approved for use in commercial applications, including artist colour materials, alongside industrial applications such as coatings and plastics.

Known commercially as Blue 10G513, YInMn has been available for industrial use under an EPA low volume exemption (LVE) since 2017 [ibid., November 2017, p. 4]. It is valued not only for its deep, vivid colour but also for its balance of visual opacity, near-infrared reflective properties and durability, according to Shepherd Color. The manganese, yttrium and indium-based pigment chemistry was discovered by chance at OSU in 2009 during research into new materials for electronics, and subsequently licensed to Shepherd Color for commercialization.

More information: www.shepherdcolor.com

Anti-scratch masterbatch from Ampacet reduces surface defects in styrenics

Masterbatch manufacturer Ampacet has introduced AntiScratch ABS 6000047-E to enhance the appearance of styrenic plastics by improving their scratch and abrasion resistance. Added during the extrusion process, the new additive masterbatch has no impact on the styrenics parts’ gloss, aesthetics or mechanical properties, the company claims.

In injection-moulded parts, AntiScratch ABS 6000047-E reduces surface defects associated with abrasions, scratches and other marks, Ampacet reports. The new grade does not migrate and therefore does not affect dye stability or lead to dye bleeding, the company adds.

AntiScratch ABS 6000047-E is formulated for use in a variety of styrene-based polymers and alloys, including acrylonitrile butadiene styrene (ABS), polycarbonate (PC)/ABS, styrene acrylonitrile (SAN) and methyl methacrylate–ABS (MABS). It is suitable for various heavy-duty, end-use applications such as luggage, automotive parts, appliances, home furnishings and electronic devices, according to Ampacet. Anti-scratch agents, alongside other additive technologies that provide long-lasting surface finishes, enhance consumer perception of product quality.

More information: www.ampacet.com

Clariant creates market-specific colour & effects mix for Asian personal care packaging

Colour specialists at Clariant have taken a new approach, creating a targeted offering combining selected colours and special effects designed