Summary of CMA Glycol Ether Research Activities

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The Chemical Manufacturers Association (CMA) represents the chemical industry in America. Membership in the Association is open to manufacturers of chemicals who sell a substantial portion of the chemicals they produce to others. The Association includes about 200 member companies, most of whom operate in the United States, with a few based in Canada. The size of CMA's member companies and the products they make are as varied as chemistry itself. Together, they represent a major portion of the productive capacity of the industry.

The Association administers special research and advocacy efforts frequently involving only a single product line. The projects probe for potential hazards from chemicals, providing information essential for protecting employees and the public. Some 23 projects are currently underway, funded by voluntary subscription from member companies.

Eight manufacturers of glycol ethers established the Glycol Ethers Program Panel under the auspices of the CMA in 1980. The companies participating in the program are Dow Chemical USA, ICI Americas Inc., Olin Corporation, PPG Industries, Shell Chemical Company, Tennessee Eastman Company, Texaco Chemi-

Table 1. CMA Glycol Ether Panel Studies.

| Ether                          | Study                                      |
|-------------------------------|--------------------------------------------|
| Ethylene glycol monomethyl ether | Inhalation                                 |
|                               | Rabbit 90-day toxicity                     |
|                               | Rabbit developmental toxicity probe        |
|                               | Mouse developmental toxicity probe         |
|                               | Rat developmental toxicity probe           |
| Ethylene glycol monoethyl ether | Inhalation                                 |
|                               | Rabbit 90-day toxicity                     |
|                               | Rat 90-day toxicity                        |
|                               | Rabbit developmental toxicity probe        |
|                               | Rabbit developmental toxicity              |
| Ethylene glycol monoethyl ether acetate | Inhalation                                |
|                               | Rabbit developmental toxicity probe        |
| Ethylene glycol monobutyl ether   | Inhalation                                 |
|                               | Rabbit developmental toxicity              |
|                               | Rabbit developmental toxicity probe        |
|                               | Rat developmental toxicity                 |
| Diethylene glycol monomethyl ether | Dermal                                    |
|                               | Rabbit 90-day toxicity study               |
|                               | Dermal                                     |
|                               | Rabbit developmental toxicity probe        |
|                               | Rabbit developmental toxicity              |
|                               | Inhalation                                 |
|                               | Rabbit 90-day toxicity                     |

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cal Company and Union Carbide Corporation. The Program Panel established a Toxicology Research Task Group (TRTG) to act as an expert resource group to the panel and to recommend a testing program on the health effects of glycol ethers. From these recommendations of the TRTG, the panel has sponsored an active testing program on various glycol ethers.

The testing program has resulted in the initiation of several comprehensive toxicological studies. These studies have been conducted in commercial contract toxicology laboratories as well as industry toxicology laboratories. All toxicology work sponsored by the panel is being conducted in compliance with good laboratory practices. Upon completion of the individual studies, the final reports are sent to the various federal agencies (EPA, OSHA, CPSC, NIEHS, NIOSH, FDA) and made available to the public for a nominal fee upon written request to CMA. In addition, the scientific personnel at the various laboratories are encouraged to publish the results of the studies in peer-reviewed journals. Periodic research status reports are issued by CMA Program Panel.

Papers in this volume by industry scientists reflect a major portion of the completed program panel-sponsored testing (Table 1). This work is supplemental to work sponsored by individual companies, academic institutions and governmental programs.

The panel has additional studies which are in the planning or initiation stage on the diethylene series of glycol ethers. As with the completed studies, these reports will be made publicly available.