

Carbonic Acid, Oxydiethylene Diallyl Ester – Comments of Environmental Defense

(Submitted via Internet May 15, 2002)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for Carbonic Acid, Oxydiethylene Diallyl Ester CAS no. 142-22-3.

The sponsor reports that carbonic acid, oxydiethylene diallyl ester (diallyl diglycol carbonate or DAC) is a specialty chemical used as a monomer in the manufacture of optical lenses. As a result, environmental and human exposure, other than occupational exposures, is anticipated to be minimal. DAC has not been the subject of a great deal of toxicological research; however, those studies described in the Robust Summary for this chemical appear well designed and are described in some detail. Many were performed under GLP. Results of these studies indicate DAC is irritating to skin and absorbed through the skin in sufficient quantities to result in systemic toxicity. It appears to be a sensitizing agent in humans and may cause irritant dermatitis in some individuals exposed occupationally. Review of the Test Plan indicates that most of the SIDS elements are addressed for this compound. Where adequate data for SIDS elements are not available, the sponsor has proposed to conduct testing, and we agree with those recommendations. We have only the following relatively minor comments regarding the Test Plan.

1. The table on page 1 of the Test Plan lists the SIDS elements, noting those elements for which data are adequate and those for which additional testing will be done. A second table presenting the actual results for those SIDS elements for which data are available would be helpful. It would also be informative if those data that are based on experimental numbers and those that are calculated could be clearly indicated.

2. Section 4.5.1 Metabolism: It is stated here that "DAC undergoes hydrolysis under biological conditions," but not indicated whether hydrolysis can be attributed to the chemical reactivity of DAC or if is actually metabolized by a biological organism. This should be stated more clearly.

Thank you for this opportunity to comment.

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