

## EPA Comments on Chemical RTK HPV Challenge Submission:

### Dioxolane

#### SUMMARY OF EPA COMMENTS

The sponsor, The Dioxolane Consortium, submitted a Test Plan and Robust Summaries to EPA, dated November 20, 2000, for Dioxolane (CAS # 646-06-0). EPA posted the submission on the RTK HPV Challenge Web site on December 19, 2000.

EPA has reviewed this submission and has reached the following conclusions:

1. Physicochemical and Environmental Fate Data. Robust summaries are adequate, except that for the fugacity model, the sponsor needs to provide the assumption and data inputs to the model (see Guidance for Robust Summary preparation).
2. Health Endpoints: All appropriate SIDS-level tests have been performed and adequate robust summaries have been submitted.
3. Ecotoxicity. The robust summaries for fish, algae, and invertebrate studies are adequate for the purposes of the U.S. HPV Challenge Program.

EPA is requesting that the Sponsor advise the Agency within 60 days of any modifications to its submission.

#### EPA COMMENTS ON THE DIOXOLANE CHALLENGE SUBMISSION

##### General

The Consortium has prepared an excellent hazard profile.

##### Test Plan

Chemistry (melting point, boiling point, vapor pressure, water solubility, and partition coefficient).

Adequate existing data are available for these endpoints.

Fate (photodegradation, stability in water, biodegradation, and transport/distribution).

Adequate existing data are available for these endpoints.

Health Effects (acute toxicity, repeat dose toxicity, genetic toxicity, and reproductive/developmental toxicity).

Adequate existing data are available for these endpoints.

Ecological Effects (fish, daphnid, and algal toxicity)

Adequate existing data are available for these endpoints.

## **SPECIFIC COMMENTS ON ROBUST SUMMARIES**

### **Fate**

For the fugacity model, the sponsor needs to provide the assumption and data inputs to the model (see Guidance for Robust Summary preparation).

EPA recommends using the EQC Level III model from the Canadian Environment Modeling Centre at Trent University, which allows full control of data inputs. This model can be found at the following Web address: <http://www.trentu.ca/academic/aminss/envmodel/>.

### **Followup Activity**

EPA requests that the Sponsor advise the Agency within 60 days of any modifications to its submission.