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December 27, 2004

Administrator
US Environmental Protection Agency
P.O. Box 1473
Merrifield, VA 22116

Re: Huntsman-Nissan-TGIC Consortium for HPV Challenge Program for Triglycidyl Isocyanurate (CAS No. 2451-62-9)
Consortium Number for Huntsman-Nissan-TGIC:

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Dear EPA Administrator:

On behalf of the Consortium for Huntsman-Nissan-TGIC, I have enclosed the accompanying submission that contains:

- 1) Transmittal Letter addressed to EPA Administrator
- 2) Robust Summary for TGIC
- 3) Test Plan for TGIC

The above information is being submitted for the US EPA HPV Challenge Program (AR-201) for Triglycidyl Isocyanurate (CAS No. 2451-62-9).

We have enclosed 1.44 MB, high-density, double-sided floppy diskette that contains the above information in **WORD** format. We are also submitting hard copies for the above information for your use.

Please contact us if you need any additional information.

Sincerely,

N. Bhushan Mandava, Ph.D.
Consortium for Huntsman-Nissan-TGIC

Cc: Donald Rodier
High Volume Production Chemicals Branch
Risk Assessment Division
OPPT, EPA

Enclosures

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December 27, 2004

Administrator
US Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Huntsman-Nissan-TGIC Consortium for HPV Challenge Program for Triglycidyl Isocyanurate (CAS No. 2451-62-9)
Consortium Number for Huntsman-Nissan-TGIC:

Dear EPA Administrator:

On behalf of the Consortium for Huntsman-Nissan-TGIC, I am pleased to submit our response to the US EPA HPV Challenge Program for Triglycidyl Isocyanurate (CAS No. 2451-62-9). We acknowledge that this submission will be made available to the public for a 120-day comment period. Members of Consortium include:

- Huntsman Advanced Materials, Brewster, New York
- Nissan Chemical Industries, Ltd., Tokyo, Japan

This submission satisfies the commitment letters by both companies in 2000, to support this chemical in the voluntary HPV Challenge Program. Follow-up correspondence in 2004 notified the Agency regarding the status of the project..

Triglycidyl isocyanurate (TGIC) is a trifunctional epoxide resin used primarily as a hardener for polyester-based powder coatings. TGIC is also known by the chemical name: 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3,5-tris(oxiranylmethyl)-, identified by Chemical Abstract Service (CAS) No. 2451-62-9.

We have reviewed several studies for the Robust Summary Document. These studies were generally selected to conform to the data requirements described in the EPA's "Draft Guidance on Developing Robust Summaries" (October 22, 1999). The reference section at the end of this document lists all of the reports included in the Robust Summary and also describes several additional studies for TGIC. The additional studies were conducted by the sponsors, as well as other interested parties; in order to evaluate various health related endpoints associated with the manufacture and occupational use of TGIC. Some of these studies may not have been discussed in detail in this document in an effort to avoid redundancy and to help maintain focus on the requirements described in the Robust Summary.

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All SIDS Level I endpoints have been adequately addressed. Definitive developmental toxicity/teratogenicity studies, conducted in accordance with OECD guidelines, do not appear to be available. However, the lack of findings in the 13-week reproductive toxicity screening study provides sufficient data to address any concerns on reproductive and developmental toxicity endpoints. In addition, the negative results in the Dominant Lethal Assay and Mammalian Spot Test and the lack of any significant histopathological findings in the reproductive organs of the test animals in the two year chronic exposure study provide additional scientific evidence for the lack of reproductive and development toxicity from exposures to TGIC. The weight of this scientific data fully supports the conclusion that TGIC is not likely to be a reproductive/developmental toxicant.

The lack of carcinogenic responses in the cancer screening endpoint in a 13 week subchronic study, the 30 week dermal initiation-promotion study and the two year cancer bioassay, fully support the position that TGIC is unlikely to be a carcinogen. Thus, the necessary toxicological endpoints for TGIC have been addressed, and no further study is necessary or proposed. The HPV testing commitment for TGIC is complete.

The attached table identifies the end points for which robust summaries have been submitted. We believe that no additional testing is needed to satisfy the US EPA HPV Challenge Program for this substance.

Sincerely,

N. Bhushan Mandava, Ph.D.
Consortium for Huntsman-Nissan-TGIC

cc: Mr. Hiromu Ebizuka
Raymond J. Papciak

Enclosures

SUMMARY FOR TGIC TEST PLAN

STUDY	Data Available?	Data Adequate?	Testing Required?
	Y/N	Y/N	Y/N
Physical-Chemical Data			
Melting Point	Y	Y	N
Boiling Point	Y	Y	N
Vapor Pressure	Y	Y	N
Partition Coefficient	Y	Y	N
Water Solubility	Y	Y	N
Environmental Fate & Pathway			
Photodegradation	N	Y	N
Stability in Water	Y	Y	N
Transport Between Environ. Compartments (Fugacity)	Y	Y	N
Biodegradation	Y	Y	N
Ecotoxicity			
Acute Toxicity to Fish	Y	Y	N
Acute Toxicity to Aquatic Plants	Y	Y	N
Acute Toxicity to Aquatic Invertebrates	Y	Y	N
Toxicity to Algae	Y	Y	N
Toxicity			
Acute Oral Toxicity	Y	Y	N
Acute Inhalation Toxicity	Y	Y	N
Acute Toxicity to the Eye	Y	Y	N
Acute Dermal Toxicity	Y	Y	N
Genotoxicity <i>in vivo</i> (Chrom. Aberrations)	Y	Y	N
Genotoxicity <i>in vitro</i> (Gene Mutation)	Y	Y	N
Genotoxicity <i>in vitro</i>	Y	Y	N
Repeated Dose Toxicity	Y	Y	N
Reproductive Toxicity	Y	Y	N
Developmental Toxicity/Teratogenicity	N	Y	N