

## Initial Risk-Based Prioritization of High Production Volume Chemicals

**Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)- (CASRN 61898-95-1)**  
**(9<sup>th</sup> CI and CA Index Name: Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-, methyl ester)**

This document is based on screening-level characterizations done by EPA on the environmental fate, hazard, and exposure of the listed chemical. The information used by EPA includes data submitted under the HPV Challenge Program<sup>1</sup> and the 2006 Inventory Update Reporting (IUR)<sup>2</sup>, and data publicly available through other selected sources<sup>3</sup>. This screening-level prioritization presents EPA's initial thinking regarding the potential risks presented by this chemical and future possible actions that may be needed. These initial characterization and prioritization documents do not constitute a final Agency determination as to risk, nor do they determine whether sufficient data are available to characterize risk. Rather, they are interim evaluations. Recommended actions may be considered by EPA in the future based on a relative judgment regarding this chemical in comparison with others evaluated under this program, and in light of the uncertainties presented by gaps in the available data that may be determined to exist. These evaluations contribute to meeting U.S. commitments under the chemicals cooperation work being done in North America<sup>4</sup> through the EPA Chemical Assessment and Management Program (ChAMP)<sup>5</sup>.

This chemical was considered in 2003 to have met the HPV Challenge Program guidance for a closed-system intermediate, a chemical manufactured and processed only in closed systems to produce other chemicals. Because closed-system intermediates have a limited potential for exposure generally attributable only to isolated accidental releases, toxicity testing elements in the HPV Challenge Program were reduced for those chemicals, and consisted of the Screening Information Data Set (SIDS) minus the tests for repeated dose toxicity and reproductive toxicity, but including a developmental toxicity test<sup>6</sup>. For this chemical, the sponsor provided more than the minimum data set (i.e. a combined reproductive/developmental toxicity test).

### **Hazard and Fate Summary:**

- **Human Health:** The acute oral and inhalation toxicity of this chemical in rats is low. A reproductive/developmental toxicity study in rats showed low maternal and developmental toxicity. This chemical did not induce gene mutation in bacteria or chromosomal aberrations in mammalian cells.
- **Environment:** The acute toxicity of this chemical to fish, aquatic invertebrates and aquatic plants is moderate.

---

<sup>1</sup> US EPA, HPV Challenge Program information: <http://epa.gov/hpv/>.

<sup>2</sup> US EPA, IUR information: <http://www.epa.gov/oppt/iur/index.htm>.

<sup>3</sup> US EPA, Information on additional public databases used: <http://www.epa.gov/hpvis/pubdtsum.htm>.

<sup>4</sup> US EPA, U.S. Commitments to North American Chemicals Cooperation: <http://www.epa.gov/hpv/pubs/general/sppframework.htm>.

<sup>5</sup> US EPA, ChAMP information: <http://www.epa.gov/champ/>.

<sup>6</sup> US EPA, Guidance for Testing Closed System Intermediates: <http://www.epa.gov/chemrtk/pubs/general/closed9.htm>.

- Persistence and Bioaccumulation:
  - Available data indicate that this chemical has moderate persistence.
  - Available data indicate that this chemical has low bioaccumulation potential.

**Exposure Summary:**

- Both Confidential Business Information (CBI) and non-confidential information from IUR and other sources were used in developing this initial prioritization.
- Production Volume: This chemical was an HPV with an aggregated production and/or import volume in the United States of 1 to 10 million pounds in 2001. The current production volume is unknown, but the absence of any 2006 IUR reports on this chemical would indicate that its production or import volume was below 25,000 pounds at any individual site in 2005.
- Uses: Non-confidential IUR and HPV Challenge Program submission information for this chemical indicates that it is used as an intermediate. No commercial/consumer uses were reported in the IUR submissions or in the Hazardous Substances Data Bank.
- General Population and Environment: EPA identifies a low potential that the general population or the environment might be exposed to this chemical.
- Workers: EPA identifies a low relative ranking for potential worker exposure.
- Consumers: EPA identifies a low potential that consumers might be exposed.
- Children: EPA identifies a low potential that children might be exposed.

**Risk Characterization Summary:**

EPA reviewed the information in the HPV submissions in 2003 and determined that it met the guidance for a closed-system intermediate. Therefore, there is a low concern for potential risk to aquatic organisms and the general population from environmental releases, and also to workers, consumers, and children.

- Potential Risk to Aquatic Organisms from Environmental Releases: *LOW CONCERN.*
- Potential Risk to the General Population from Environmental Releases: *LOW CONCERN.*
- Potential Risk to Workers: *LOW CONCERN.*
- Potential Risk to Consumers from Known Uses: *LOW CONCERN.*
- Potential Risk to Children: *LOW CONCERN.*

**Regulatory and Related Information Summary:**

- This chemical is listed on the TSCA Inventory. It is not otherwise regulated under TSCA.

**Assumptions and Uncertainties:**

- EPA assumes that potential exposures are very limited, based on the reported use.

**Rationale Leading To Prioritization Decision:**

- The manufacture and processing of this chemical only as an intermediate to produce other chemicals in systems that may significantly reduce the potential for worker exposure and environmental releases lead to a low concern for risk.
- The absence of 2006 IUR reports on this chemical suggests that its current production and importation volume is low.

**Prioritization Decision:**

- LOW PRIORITY – Follow-up action not suggested at this time.

**Supporting Documentation:**

**Screening-Level Risk Characterization: September 2008**

**Screening-Level Hazard Characterization: September 2008**

**Screening-Level Exposure Characterization: September 2008**