

Initial Risk-Based Prioritization of High Production Volume Chemicals

Methallyloxyphenol (CASRN 4790-71-0) (9th CI and CA Index Name: Phenol, 2-[(2-methyl-2-propen-1-yl)oxy]-)

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 Program¹ and the 2006 Inventory Update Reporting (IUR)², and data publicly available through other selected sources³. 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 America⁴ through the EPA Chemical Assessment and Management Program (ChAMP)⁵.

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 test⁶. For this chemical, the sponsor provided more than the minimum data set, including a reproductive toxicity test.

Hazard and Fate Summary:

- **Human Health:** The acute oral toxicity of this chemical to rats is low. A combined reproductive/developmental toxicity study in rats showed no reproductive, developmental, or parental systemic toxicity. This chemical was mutagenic in *in vitro* studies, but did not induce chromosomal aberrations in *in vivo* studies.
- **Environment:** Available data indicate that the acute hazard of this chemical is high to fish and aquatic invertebrates and low to aquatic plants.

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

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

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

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

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

⁶ 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 low persistence in the environment.
 - Available data indicate that this chemical has a 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: No IUR reports were submitted on this chemical in either the 2002 or 2006 reporting years, so the current production volume is unknown. It was included in the HPV Challenge program because it was reported at HPV levels in earlier years.
- Uses: In 2003, the Agency reviewed the information in the HPV Challenge Program submission and determined that this chemical met the guidance for a closed-system intermediate.
- General Population and Environment: EPA identifies a low potential that the general population and the environment might be exposed to this chemical.
- Workers: EPA identifies a low potential for 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 submission or test plan for this chemical in 2003 and determined that it met the guidance for a closed system intermediate. Therefore, there is a low concern for potential risks 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.
- This chemical is subject to a TSCA significant new use rule (SNUR) at 40 CFR 721.450. The SNUR requirements address protection in the workplace; hazard communication; use other than as an intermediate; and release to water.

Assumptions and Uncertainties:

- EPA assumes that potential exposures are very limited, based on the reported use. Given the absence of recent reporting, however, this information is not current.
- EPA has not received any claim that this chemical is no longer HPV. However, the lack of any IUR reporting on this chemical in the 2002 and 2006 reporting cycles indicates that the production volume for this chemical in the individual years covered by those reporting cycles was below 10,000 pounds (2002) and 25,000 pounds (2006) per site.

Rationale Leading To Prioritization Decision:

- The manufacture and processing of this chemical only as an intermediate in systems that may significantly reduce the potential for worker exposure and environmental releases lead to low concern for risk.
- The existing SNUR regulation would limit any other potential use of this chemical, and also restricts potential worker exposure and environmental releases.
- 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