



Propylene Glycol Monopropyl Ether

Product Stewardship Summary

December 2009

Chemical Name:	Propylene glycol monopropyl ether (PGPE)
Synonyms:	1-Propoxy-2-propanol; Propylene glycol-n-monopropyl ether; Poly-Solv MPM
CAS Number:	1569-01-3
CAS Name:	1-Propoxy-2-propanol
EC (EINECS) Number:	250-069-8

- *General Description:* Propylene glycol monomethyl ether (PGPE) is a colorless liquid at room temperature with a mild, ether-like odor. It is highly soluble (miscible) in water.
- *Manufacture:* This product is manufactured by the reaction of propanol and propylene oxide.
- *Applications:* PGPE is used in paints, varnishes, cutting oils and hydraulic fluids.
- *Benefits:* This product is miscible with water and many organic solvents.
- *General Precautions:* PGPE is of low toxicity from acute or repeated exposure regardless of the route, i.e. orally, dermally, or via inhalation. Based on this low level of toxicity, the risk of injury from exposure to PGPE, either during production or from the use of products which contain this material, is very low. PGPE is a moderate irritant to the skin. However, if contact is made with skin for an

extended period of time (several hours) under clothing, severe irritation can occur with persistent fissuring and irreversible damage. PGPE is severely irritating to the eyes with corneal injury. The time required for any damage to the eyes to heal is typically 1 to 2 weeks.

PGPE does not damage genetic material and is therefore not considered to be a mutagen.

PGPE is not a cancer-causing agent.

PGPE does not impair reproductive performance, fertility, or fetal development.

PGPE is of low toxicity to aquatic organisms. Therefore, this material does not pose any significant risk to fish, aquatic invertebrates, or aquatic plants.

The potential for absorption of PGPE by the body is very low. However, if it is absorbed, it is excreted rapidly with no potential for bioaccumulation.

- *Likelihood of Exposure:* Although most transfers of the chemical are contained in enclosed spaces, exposure to the chemical could occur at a manufacturing facility, treating plant and site of an accidental release during shipment. Generally, such exposure is low and will not present any potential for adverse effects. Even in the event of a relatively large exposure, the only effect that would be expected to occur would be transient eye irritation. From use by consumers of products containing PGPE, the highest exposures are likely to be associated with the use of paints and varnishes that contain this solvent. As is the case of use of any product containing PGPE, exposure to this chemical from the use of paints and varnishes would be very low and without potential for the development of any adverse health effects.
- *Risk Management:* The likelihood of exposure to the chemical is low when the end-user carefully reads and follows all label directions for proper use. The risk of adverse effect to health from either exposure

during production or from use by consumers of a PGPE-containing product is not significant.

For additional information, please visit our web site at www.archchemicals.com and click on "Contact Us".

This summary is intended to give general information about the chemical or categories of chemicals addressed. It is not intended to provide an in-depth discussion of all health and safety information. Additional information on the chemical is available through the applicable Material Safety Data Sheet which should be consulted before use of the chemical. This summary does not supplant or replace required regulatory and/or legal communication documents.