



## Propylene Glycol Monomethyl Ether

### Product Stewardship Summary July 2008

Chemical Name:	Propylene glycol monomethyl ether
Synonyms:	1 -Methoxy-2-propanol; 1 -methoxy-2-hydroxypropane; methoxypropanol; 2-methoxy- 1-methylethanol; Poly-Solv MPM, MPM
CAS Number:	107-98-2
CAS Name:	1-Methoxypropan-2-ol
EC (EINECS) Number:	203-539-1

- *General Description:* Propylene glycol monomethyl ether (MPM) is a colorless liquid at room temperature with a mild, ether-like odor. It is highly soluble (miscible) in water.
- *Manufacture:* During production, potential exposure to the concentrate by humans and the environment is tightly controlled and confined through strong industrial hygiene protocols and processes, engineering of the manufacturing equipment, and the use of personal protective equipment.
- *Applications:* MPM is used primarily in the chemical, agricultural, automotive, paint, lacquer, and varnish industries. Its predominant use is as a solvent in various manufacturing processes. In the U.S., MPM is used for surface coatings; cleaners; inks; adhesives/electronics; and as an intermediate in the production of other propylene glycol ether derivatives.
- *Benefits:* MPM is an effective solvent and coupling agent which evaporates quickly and is highly soluble in water. It has excellent viscosity reduction properties and low surface tension.

- *General Precautions:* MPM 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 MPM, either during production or from the use of products which contain this material, is very low. MPM is not an irritant to the skin, but it may be mildly irritating to the eye.

MPM does not produce skin sensitization.

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

MPM is not a cancer-causing agent.

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

MPM is of low toxicity to aquatic organisms. Therefore, this material does not present a significant risk to fish, aquatic invertebrates, or aquatic plants.

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

- *Physical Precautions:* MPM is a flammable liquid and should be handled in accordance with label directions.
- *Likelihood of Exposure:* MPM in concentrated form is not sold to the general public. Although most transfers of the concentrated chemical are contained in enclosed and controlled spaces, exposure to the concentrated chemical could occur at a manufacturing facility, or treating plant. Such exposures are low and will not present any potential for adverse effects. In the event of a relatively large exposure dose to a spill or mishap, the only expected effect would be transient eye irritation. For consumers using products containing diluted MPM, 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 MPM, 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 risk to either the formulator using the concentrated chemical or the consumer using products with diluted MPM is low; however, label directions for proper use should be read carefully and followed.

For additional information, please visit our web site at [www.archchemicals.com](http://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.