



# Propylene Glycol

## Product Stewardship Summary

December 2009

Chemical Name:	Propylene glycol (PG)
Synonyms:	2,2-Propanediol; Methyl ethylene glycol; 1,2-Dihydroxypropane
CAS Number:	57-55-6
CAS Name:	2,2-Propanediol
EC (EINECS) Number:	200-338-0

- *General Description:* Propylene glycol (PG) is a colorless, almost odorless, slightly viscous liquid with a slightly acid taste. It is highly soluble (miscible) in water.
- *Manufacture:* This product is manufactured by the reaction of water and propylene oxide.
- *Applications:* PG is used in antifreeze, coolants, deicing fluids, hydraulic fluids, food and tobacco products.
- *Benefits:* PG is completely miscible with water and many organic solvents and will dissolve in a number of resins, dyes and essential oils.
- *General Precautions:* PG 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 PG, either during production or from the use of products

which contain this material, is very low. PG is not an irritant to the skin or the eyes.

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

PG is not a cancer-causing agent.

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

PG 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 PG 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 PG, 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 PG, 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 PG-containing product is not significant.

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.