
1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Code	43040286
Trade Name	Shipley BPR Thinner
Manufacturer/Supplier	Shipley Company
Address	455 Forest St. Marlborough, Massachusetts 01752
Phone Number	(508) 481-7950
Emergency Phone Number	(508) 481-7950
Chemtrec #	(800) 424-9300
MSDS first issued	12 December 2001
MSDS data revised	
Prepared By:	Environmental, Health & Safety Department
Local Sales Company	Shipley Company, 455 Forest Street, Marlboro, MA 01752 (508-481-7950)

2. COMPOSITION/INFORMATION ON THE INGREDIENTS

Components without CAS numbers are Trade Secret

Component Name	CAS# / Codes	Concentration
Electronic grade propylene glycol monomethyl ether	107-98-2	95.00 - 100.00

3. HAZARD IDENTIFICATION

Main Hazards	- Irritant - Flammable - Skin - Eye - Respiratory System - Nervous System - Kidney - Liver
Routes of Entry	Inhalation, ingestion, eye and skin contact, absorption.
Carcinogenic Status	Not considered carcinogenic by NTP, IARC and OSHA
Target Organs	- Skin - Eye - Nervous System - Respiratory System - Liver - Kidney
Health Effects - Eyes	Liquid or vapor may cause pain, transient irritation and superficial corneal effects.
Health Effects - Skin	Material may cause slight irritation on prolonged or repeated contact. Repeated and/or prolonged contact may lead to: - drowsiness - liver damage - kidney damage - central nervous system depression
Health Effects - Ingestion	A large dose may have the following effects: - drowsiness - liver damage - kidney damage - central nervous system depression

3. HAZARD IDENTIFICATION

Health Effects - Inhalation	Exposure to vapor at high concentrations may have the following effects: - irritation of nose, throat and respiratory tract - liver damage - kidney damage - central nervous system depression
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4. FIRST AID MEASURES

First Aid - Eyes	Immediately flush the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.
First Aid - Skin	Wash skin with water. Continue washing for at least 15 minutes. Obtain medical attention if blistering occurs or redness persists.
First Aid - Ingestion	Wash out mouth with water. Have victim drink 1-3 glasses of water to dilute stomach contents. Induce vomiting. Obtain medical attention. Never administer anything by mouth if a victim is losing consciousness, is unconscious or is convulsing.
First Aid - Inhalation	Remove from exposure. If there is difficulty in breathing, give oxygen. Seek medical attention if symptoms persist.
Advice to Physicians	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media	Use water spray, foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray.
Special Fire-Fighting Procedures	This product may give rise to hazardous vapors in a fire. Vapors can travel a considerable distance to a source of ignition and result in flashback.
Unusual Fire & Explosion Hazards	Pressure may build up in closed containers with possible liberation of combustible vapors.
Protective Equipment for Fire-Fighting	Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures	Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Finally flush area with plenty of water.
Personal Precautions	Wear appropriate protective clothing. Wear respiratory protection. Eliminate all sources of ignition.

6. ACCIDENTAL RELEASE MEASURES

Environmental Precautions Prevent the material from entering drains or water courses.

7. HANDLING AND STORAGE

Handling Use local exhaust ventilation. Avoid contact with eyes, skin and clothing. Keep container tightly closed when not in use.

Storage Store in original containers. Store away from sources of heat or ignition. Storage area should be:
- cool - dry - well ventilated - out of direct sunlight

Other

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards

Electronic grade propylene glycol monomethyl ether ACGIH: TLV 100ppm (369mg/m³) 8h TWA. ACGIH: STEL 150ppm (553mg/m³) 15min TWA. OSHA: PEL 100ppm (360mg/m³) 8h TWA. OSHA: STEL 150ppm (540mg/m³) 15min TWA. UK EH40: OES 100ppm (360mg/m³) 8h TWA. UK EH40: OES 300ppm (1080mg/m³) 15min TWA. Can be absorbed through skin.

Engineering Control Measures Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (local exhaust), and control of process conditions.

Respiratory Protection Respiratory protection if there is a risk of exposure to high vapor concentrations. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

Hand Protection Butyl rubber gloves. Other chemical resistant gloves may be recommended by your safety professional.

Eye Protection Chemical goggles.

Body Protection Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid
Color Clear
Odor Slight Ethereal

9. PHYSICAL AND CHEMICAL PROPERTIES

VOC (g/l)	919
Specific Gravity	0.919
pH	Neutral
Boiling Range/Point (°C/F)	120 / 248.3
Flash Point (PMCC) (°C/F)	32 / 90
Explosion Limits (%)	Lower limit 1.5 at 20 °C. Upper limit 7.0 at 20 C..
Solubility in Water	Completely soluble.
Vapor Density (Air = 1)	Heavier than air.
Evaporation Rate	Slower than ether
Vapor Pressure	Propylene Glycol Monomethyl Ether: 12.5 at 25 °C.

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions to Avoid	- High temperatures - Static discharge
Incompatibilities	- Oxidizing agents
Hazardous Polymerization	Will not occur.
Hazardous Decomposition Products	Combustion will generate: - carbon monoxide - carbon dioxide

11. TOXICOLOGICAL INFORMATION

Acute Data	Propylene glycol monomethyl ether: Oral LD50 (rat) 7200mg/kg. Dermal LD50 (rabbit) 13000mg/kg.
Chronic/Subchronic Data	No relevant studies identified.
Genotoxicity	The product did not exhibit mutagenic activity in the following systems (with and without metabolic activation): - Chinese hamster ovary cells No significant mutagenic response was observed and the carcinogenic potential of the material is therefore considered to be low.
Reproductive/Developmental Toxicity	Propylene glycol monomethyl ether: Inhalation teratology testing of this solvent (with less than 3% beta isomer) revealed no maternally toxic, teratogenic or fetotoxic responses in rats or rabbits exposed to concentrations as high as 1,500 ppm. Concentrations reaching nearly 3,000 ppm produced maternal toxicity in rats. When maternal toxicity occurred slight fetotoxicity but no teratogenicity was also observed in these animals. These effects were not observed in rabbits exposed to this dose level.

11. TOXICOLOGICAL INFORMATION

Propylene glycol monomethyl ether:
Dermal teratology testing of this solvent (with less than 3% beta isomer) revealed no maternally toxic, teratogenic or fetotoxic responses in rats or rabbits exposed to concentrations of 1,000 and 2,000 mg/kg per day.

Additional Data None known.

12. ECOLOGICAL INFORMATION

Mobility The product will dissolve rapidly in water. The product is poorly absorbed onto soils or sediments. The product will leach into soil.

Persistence/Degradability The product is expected to be readily biodegradable.

Bio-accumulation Product is not expected to bioaccumulate.

Ecotoxicity Propylene glycol monomethyl ether: Tests on the following species gave a LC50 of 20800mg/litre: - fathead minnows
Tests on the following species gave a LC50 of 23300mg/litre: - daphnia

13. DISPOSAL CONSIDERATIONS

Product Disposal Incineration is the recommended method of disposal. Dispose of in accordance with all applicable local and national regulations.

Container Disposal Labels should not be removed from containers until they have been cleaned. Empty containers may contain hazardous residues. Dispose of containers with care.

14. TRANSPORT INFORMATION

DOT Ground: 1-Methoxy-2-Propanol
UN Proper Shipping Name 1-Methoxy-2-Propanol
UN Class (3) Flammable Liquid
UN Number UN3092
UN Packaging Group III
N.O.S. 1: Not applicable.
N.O.S. 2: Not applicable.
Subsidiary Risks None.
CERCLA RQ None.
Marine Pollutant No.

15. REGULATORY INFORMATION

TSCA Listed	All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.
TSCA Exemptions	
TSCA Sec.12(b) Export Notification	This product does not contain any substances subject to Section 12(b) export notification.
WHMIS Classification	B.3, D.2.B.
California Proposition 65	This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.
SARA TITLE III-Section 311/312 Categorization (40 CFR 370)	Immediate, delayed, flammability hazard
SARA TITLE III-Section 313 (40 CFR 372)	This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

16. OTHER INFORMATION

NFPA Rating- FIRE	3
NFPA Rating- HEALTH	2
NFPA Rating- REACTIVITY	0
NFPA Rating- SPECIAL	None.
Revisions Highlighted	
Abbreviations	CAS#: Chemical Abstract Services Number ACGIH: American Conference of Governmental Industrial Hygienists OSHA: Occupational Safety and Health Administration TLV: Threshold Limit Value PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit NTP: National Toxicology Program IARC: International Agency for Research on Cancer R: Risk S: Safety LD50: Lethal Dose 50% LC50: Lethal Concentration 50% BOD: Biological Oxygen Demand Koc: Soil Organic Carbon Partition Coefficient.

Disclaimer

The data contained herein is based on information that Shipley Company believes to be reliable, but no expressed or implied warranty is made with regard to the accuracy of such data or its suitability for a given situation. Such data relates only to the specific product described and not to such products in combination with any other product and no agent of Shipley Company is authorized to vary any of such data. Shipley Company and its agents disclaim all liability for any action taken or foregone on reliance upon such data.

