

PROPYLENE GLYCOL USP/EP 99.9%

Material Safety Data Sheet

Revision Date: May 25, 2018

PRODUCT NAME: **PROPYLENE GLYCOL USP/EP 99.9%**

CHEMICAL PRODUCT AND DISTRIBUTOR IDENTIFICATION

TRADE NAME: PROPYLENE GLYCOL USP KOSHER

CAS#: 57-55-6

DATE: Manufacturing Date :May 25, 2018 - Expiration Date: May 25, 2020

BestGlycol - 9308-9191 qc.inc.

4500, Kimber "4", local 14

Saint-Hubert, QC.

J3Y8K5

514.562.6483

514.400.8480

www.bestglycol.com

bestglycol@gmail.com

bestglycol@bestglycol.com

EMERGENCY: CHEMTREC (800) 424-9300

COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	%	TVAEW / TLV	LD50 mg/kg	LC50 mg/kg	INHALATION
1,2dihydroxypropane	57-55-6	not listed	18,500	20,800	not known

HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

FIRST AID MEASURES

INGESTION: Give plenty of water to dilute product.

Do not induce vomiting (NOTE below).

Keep victim quiet.

If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material.

Seek medical help promptly.

EYE CONTACT: Wash eyes with plenty of water, holding eyelids open.

Seek medical assistance promptly if there is irritation.

SKIN CONTACT: Wash with plenty of water. Remove contaminated clothing and do not reuse until thoroughly laundered.

INHALATION: Remove from contaminated area promptly.

CAUTION: Rescuer must not endanger himself!

If breathing stops, administer artificial respiration and seek medical aid promptly.

NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs.

The danger of this is greater than the risk of poisoning through absorption of this relatively low toxicity substance.

The stomach should only be emptied under medical supervision, and after the installation of an airway to protect the lungs.

ACCIDENTAL RELEASE MEASURES

PHYSICAL/CHEMICAL CHARACTERISTICS

ODOR & APPEARANCE: Clear, colorless, odorless, viscous, hygroscopic liquid

ODOR: Threshold not known odorless VAPOR PRESSURE: 0.08mmHg / 0.011kPa (20°C / 68°F)

EVAPORATION RATE (Butyl Acetate = 1): 0.01

VAPOR DENSITY (AIR = 1): 2.5

BOILING RANGE: 188°C / 370°F

FREEZING POINT: -60°C / -76°F – super cools readily

SPECIFIC GRAVITY: 1.037 (20/20°C)

WATER SOLUBILITY: Complete

ALSO SOLUBLE IN: All polar organic solvents and benzene

Limited solubility in aliphatic hydrocarbons

VISCOSITY: 56 Centipoise (20°C / 68°F)

pH: None – (does not liberate hydrogen ions when dissolved)

MOLECULAR WEIGHT: 76 grams per mole

FIRE & EXPLOSION HAZARD DATA

FLASH POINT: Above 99°C / 210°F (closed cup)

AUTO-IGNITION TEMP: 371°C / 700°F

FLAMMABLE LIMIT, %: 2.6 – 12.5

COMBUSTION PRODUCTS: Carbon monoxide, nitrogen oxides, smoke, part oxidized hydrocarbon fragments

FIRE FIGHTING PRECAUTIONS: Foam, dry chemical, water fog, water spray; Fire fighters must wear SCBA

STATIC CHARGE ACCUMULATION: Cannot accumulate a static charge on agitation or pumping

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ACCIDENTAL RELEASE MEASURES

LEAK PRECAUTION: Dyke to control spillage and prevent environmental contamination

HANDLING SPILL: Recover free liquid with suitable pumps; absorb residue on an inert sorbent, sweep, shovel and store in closed containers for recycling or disposal.

STABILITY/REACTIVITY DATA

DANGEROUS REACTIONS: Strong oxidizing agents

ADDITIONAL DANGEROUS REACTIONS: Attacks polyvinyl chloride; elastomers like Dacron & epoxy are attacked >95°C

STABILITY/POLYMERIZATION: Stable; will not polymerize

DECOMPOSITION PRESENCE: Not known

DECOMPOSITION PRODUCTS: None apart from Hazardous Combustion Products

MECHANICAL IMPACT SENSITIVITY: No

HEALTH HAZARD DATA

ACUTE EXPOSURE EFFECTS: no data available

SKIN CONTACT: Little to no effect

SKIN ABSORPTION: Slight; no toxic effects likely by this route

EYE CONTACT: Little to no effect

INHALATION: Strongly heated liquid may create sufficient vapor to irritate;

INGESTION: Little to no effect; also little effect in experimental long-term inhalation studies

CHRONIC EXPOSURE EFFECTS: no data available

GENERAL: Prolonged skin exposure has caused irritation in 16% of dermatitis patients. Irritation seen in normal people appears to have been caused by local osmotic dehydration of skin which disappeared rapidly after product removed.

SENSITIZING: NOT A SENSITIZER IN HUMANS OR ANIMALS

CARCINOGEN/TUMORIGEN: Not considered a tumorigen or a carcinogen in humans or animals

REPRODUCTIVE EFFECT: No known effect in humans or animals

MUTAGEN: No known effect on humans or animals

SYNERGISTIC WITH: Not known

HANDLING AND STORAGE

STORAGE: Store in a dry environment, away from open flame and oxidizing agents.

Always ensure that containers, whether empty or full, or part full, are tightly sealed unless in use. If product is heated above 100°C (212°F), do not breathe the vapor.

Never cut, drill, weld or grind on or near this container. Wash work clothes frequently.

An eye bath and safety shower should be available near the workplace.

EXPOSURE CONTROLS / PERSONAL PROTECTION

STEL: Not listed

VENTILATION: No special ventilation required

HANDS: No special protective gloves required

EYES: Safety glasses with side shields – always protect the eyes

CLOTHING: No special protective clothing required

TOXICOLOGICAL INFORMATION

LD50 (oral) 20,000mg/kg (rat),

22,000mg/kg (mouse & dog),

18,500mg/kg (rabbit & guinea pig)

LD50 (skin) 20,800mg/kg (rabbit)

LC50 (inhalation) not known

ECOLOGICAL INFORMATION

BIOACCUMULATION: This product is not a bio-accumulator – biological half-life is less than 3 hours

BIODEGRADATION: This product degrades readily in the presence of oxygen with 78% biodegradation in 40 days

ABIOTIC DEGRADATION: This product reacts with atmospheric hydroxyl radicals; Its estimated half-life in air is 32 hours

MOBILITY IN SOIL, WATER: This product is water soluble and moves readily in soil and water.

DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: *Do not flush to sewer.*

Recycle solvent if possible

If local regulations permit, may be put in sanitary landfill,

May be incinerated in approved facility after mixing with a suitable flammable waste.

CONTAINERS

DRUMS: Should be reused. Recondition and pressure test by a licensed re-conditioner prior to reuse.

PAILS: Must be vented and thoroughly dried prior to crushing and recycling.

STEEL CONTAINERS: Must be inspected, pressure tested & recertified every 5 years.

Never cut, drill, weld or grind on or near this container, even if empty.

INTERMEDIATE BULK CONTAINERS (IBCs): Polyethylene bottle must be pressure tested & recertified at 30 months. Replace at 60 months (5yrs).

TRANSPORT INFORMATION

U.S.A. 49	CFR PIN	UN not regulated for transport
Shipping Name	Not regulated for transport	
Class	Not regulated for transport	
Packing Group	Not regulated for transport	
CANADA TDG	PIN UN	Not regulated for transport
Shipping Name	Not regulated for transport	
Class	Not regulated for transport	
Packing Group	Not regulated for transport	
MARINE POLLUTANT	Not a marine pollutant	

REGULATORY INFORMATION

All components of this product are listed on the following inventories:

TSCA (Toxic Substances Control Act)

DSL (Canada)

EINECS/ELINCS (Europe)

ALLOWABLE TOLERANCES:

Residues of propylene glycol are exempted from the requirement of a tolerance when used as a solvent, co-solvent in accordance with good agricultural practices as inert (or occasionally active) ingredients in pesticide formulations applied to growing crops or to raw agricultural commodities after harvest.

PROPYLENE GLYCOL is exempted from the requirement of a tolerance when used as a solvent, co-solvent in accordance with good agricultural practice as inert (or occasionally active) ingredients in pesticide formulations applied to animals.

OTHER OCCUPATIONAL PERMISSIBLE LEVELS:

Workplace Environmental Exposure Level (WEEL): 8hr Time-weighted Average (TWA) 50ppm, total 10 mg/cu m, aerosol only.

REGULATORY INFORMATION (Cont'd)

ATMOSPHERIC STANDARDS:

This action promulgates standards of performance for equipment leaks of Volatile Organic Compounds (VOC) in the Synthetic Organic Chemical Manufacturing Industry (SOCMI). The intended effect of these standards is to require all newly constructed, modified, and reconstructed SOCMI process units to use the best demonstrated system of continuous emission reduction for equipment leaks of VOC, considering costs, non air quality health and environmental impact and energy requirements.

PROPYLENE GLYCOL is produced, as an intermediate or a final product, by process units covered under this sub-part.

STATE DRINKING WATER GUIDELINES: New Hampshire 140,000 ug/l

FIFRA REQUIREMENTS:

As the federal pesticide law FIFRA directs, EPA is conducting a comprehensive review of older pesticides to consider their health and environmental effects and make decisions about their future use.

Under this pesticide re-registration program, EPA examines health and safety data for pesticide active ingredients initially registered before November 1, 1984, and determines whether they are eligible for re-registration.

In addition, all pesticides must meet the new safety standard of the Food Quality Protection Act of 1996.

Pesticides for which EPA had not issued Registration Standards prior to the effective date of FIFRA, as amended in 1988, were divided into three lists based upon their potential for human exposure and other factors, with List B containing pesticides of greater concern and List D pesticides of less concern.

PROPYLENE GLYCOL is found on List C. Case No: 3126; Pesticide type: insecticide, fungicide, anti-microbial; Case Status: OPP is reviewing data from the pesticide's producers regarding its human health and/or environmental effects, or OPP is determining the pesticide's eligibility for re-registration and developing the Re-registration Eligibility Decision document.

Active ingredient (AI): Propylene glycol; Data Call-in (DCI) Date(s): 08/02/93; AI Status: The producers of the pesticide has made commitments to conduct the studies and pay the fees required for re-registration, and are meeting those commitments in a timely manner.

FDA REQUIREMENTS:

Substance added directly to human food affirmed as generally recognized as safe.

Propylene glycol used in animal drugs, feeds, and related products is generally recognized as safe when used in accordance with good manufacturing or feeding practice.

Propylene glycol used in animal drugs, feeds, and related products is generally recognized as safe (except in cat food) when used in accordance with good manufacturing or feeding practice. Drug products containing certain active ingredients offered over the counter (OTC) for certain uses.

PROPYLENE GLYCOL is included in pediculicide drug products.

OTHER INFORMATION

CANADA – WHMIS: Not controlled under WHMIS

KEY: B 2 – Flash Point <38°C,
B 3 – Flash Point >38°C &<93°C
D 1 – Immediately Toxic,
D 2 – Chronic Toxicity
C – Oxidizing Substance,
E – D Corrosive

U.S.A.-HMIS: Health-0, Fire-1, Reactivity-0

KEY: 0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

The data herein are based on our current knowledge and believed to be reliable. **9308-9191 Québec Inc.**, provides this information without any representation or warranty, expressed or implied, regarding its accuracy or correctness.

Users must make their own determination that handling, storage and use of the product in the anticipated manner is safe and appropriate. Because these actions of the user are out of our control, and may be beyond our knowledge, we do not assume responsibility and expressly

disclaim liability for loss, damage, expense or any other claim arising out of or in any way connected with the handling, storage, use or disposal of the product.

Disposal of containers must comply with applicable federal, state and local laws and regulations. Empty containers should never be given to individuals.