Safety Data Sheet

PROPYLENE GLYCOL, REAGENT

Section 1 - Chemical Product and Company Identification

SDS Name: Propylene Glycol, Reagent
Catalog Numbers: SO-422
Company Identification: ROWLEY BIOCHEMICAL
10 ELECTRONICS AVENUE
DANVERS, MA 01923
For information, call: 978-739-4883
Emergency Number: 800-424-9300
For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications Category
HEALTH HAZARDS

H303-Acute Oral Toxicity: 5
H313-Acute Dermal Toxicity: 5
H316-Skin Corrosion/Skin Irritation: 3
H320-Eye damage/Irritation: 2B
H373-Specific Target Organ Toxicity(Repeated): 2

PHYSICAL HAZARDS Category

Not Available

ENVIRONMENTAL HAZARD

Acute environmental Hazards: Not classified
Chronic environmental Hazards: Not classified

Pictogram or Hazard Symbols

Warning! Harmful if swallowed.
Harmful in contact with skin.
Causes mild skin irritation.
Causes eye irritation.

Warning! May cause damage to the following organs: central nervous system (CNS) through prolonged or repeated exposure.

Precautionary Statement Prevention.

H303
P312 Call a physician if you feel unwell.

H313
P312 Call a POISON CENTER or doctor/physician if you feel unwell.

H316
P332 + P313 If skin irritation occurs, get medical advice/attention.

H320
P264 Wash thoroughly after handling.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.

H373
P261 Avoid breathing fumes/mist/vapors.
P314 Get Medical advice /attention if you feel unwell
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
57-55-6	Propylene glycol	100	200-338-0

Section 4 - First Aid Measures

Eye Exposure: Corrosive to naked eye; in case of contact flush eyes well for 15 minutes,

lifting the lower and upper eyelids occasionally. May cause permanent eye damage or blindness. Seek medical attention.

Dermal Exposure: Obtain medical attention: Corrosive to exposed skin. Flush skin well with water for 15 minutes, wash with soap and water. Remove affected clothing, get medical attention. May cause deep, penetrating burns.

Oral Exposure: Will cause severe burns to the mouth and severe and permanent damage to the digestive tract. Causes gastrointestinal burns and perforation of the digestive tract. Get Medical Attention immediately. Do not induce vomiting; give large quantities of water.

Inhalation Exposure: If inhaled, remove to fresh air. If not breathing give artificial respiration. Seek medical attention. Inhalation of vapors may cause coughing choking, inflammation of the nose, throat, and upper respiratory tract. In severe cases, may pulmonary edema, circulatory failure, and death.

Section 5 - Fire Fighting Measures

NFPA HEALTH **1** FLAMMABILITY **0** REACTIVITY **0**

Extinguishing media: Water spray. Neutralize with soda ash or slaked lime
Special fire fighting procedures: Wear chemically retardant gear and NIOSH approved self-contained breathing apparatus. Thermal decomposition produces irritating and toxic fumes. Extreme heat or contact with metals can release flammable hydrogen gas.
Toxic gases released: Hydrogen chloride, hydrogen gas.

Section 6 - Accidental Release Measures

Methods for Cleaning up: Ventilate area of leak or spill. Stop leak if possible to do so without risk. Clean-up personnel should wear protective clothing and NIOSH approved respirator. Dike and cover the contaminated areas with absorbent, non-combustible material such as earth, sand, or vermiculite. Neutralize with alkaline material such as soda ash or lime. Do not use combustibles. Do not flush to sewer.

Section 7 - Handling and Storage

Wash thoroughly after handling. Remove contaminated clothing and wash before re-use. Do not breathe mist or vapor. Do not expose eyes, skin, or clothing. Keep container closed tightly. Avoid contact with combustibles. Do not use with metal tools or items. Use with adequate ventilation or respiratory protection. Do not store near combustibles or in direct sunlight. Store in a cool, dry, well-ventilated area away from incompatible substances. Separate from metals, alkali, and organics. Residue in empty containers may still be hazardous.

Section 8 - Exposure Controls, Personal Protection

Respiratory protection: Wear NIOSH/MESA approved full or half face piece (with goggles) respiratory protective equipment to avoid exposure to iodine vapors above 0.1 ppm. A respiratory protection program complying with requirements of 29 CFR 1910.134 is recommended.
Ventilation: Where adequate ventilation is not available, use NIOSH approved vapor respirator with dust, fume and mist filters. Local ventilation through fume hoods or laminar flow stations is also preferred. Keep fumes away from strong bases.

Personal Protective Equipment:
Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles/ face shield.

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: colorless viscous
Odor: Odorless
pH: Not available.
Vapor Pressure: 0.08 mm Hg @ 20 deg C
Vapor Density: 2.62 (air=1)
Evaporation Rate: Not available.
Viscosity: 58.1 cps @ 20 deg C
Boiling Point: 187 deg C
Freezing/Melting Point:-60 deg C
Decomposition Temperature: Not available.
Solubility: Soluble.
Specific Gravity/Density:1.0360 g/cm3
Molecular Formula:C3H8O2
Molecular Weight:76.09g/mole

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.
Conditions to avoid: Excess heat, sunlight, confined spaces.
Hazardous Decomposition Products: Hydrogen chloride fumes, hydrogen gas
Hazardous Polymerization: Will not occur.
Incompatibilities with other materials: Most common metals, strong bases, metal oxides, amines, hydroxides, cyanides, sulfides, sulfites, formaldehyde, and carbonates.

Section 11 - Toxicological Information

RTECS#:
CAS# 57-55-6: TY2000000
LD50/LC50:
CAS# 57-55-6:
Draize test, rabbit, eye: 100 mg Mild;
Draize test, rabbit, eye: 500 mg/24H Mild;
Oral, mouse: LD50 = 22 gm/kg;
Oral, mouse: LD50 = 20300 mg/kg;
Oral, rabbit: LD50 = 18500 mg/kg;
Oral, rat: LD50 = 20 gm/kg;
Skin, rabbit: LD50 = 20800 mg/kg;
Skin, rabbit: LD50 = 20800 mg/kg;
.

Carcinogenicity:
CAS# 57-55-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found
Teratogenicity: An expert panel convened by the NTP's Center for the Evaluation of Risks to Human Reproduction concluded 2/13/03 that developmental and reproductive risks stemming from exposure to the chemicals propylene glycol and ethylene glycol are negligible.
Reproductive Effects: When propylene glycol was given at 30 percent in the diet, it affected reproduction in rates in rats. It has generally not affected fertility or reproduction, except at very high doses where effects could be attributed to nutritional deficiency.
Mutagenicity: DNA Inhibition: Subcutaneous, mouse = 8000 mg/kg.; Cytogenetic Analysis: Subcutaneous, mouse = 8000 mg/kg.; Cytogenetic Analysis: Hamster, Fibroblast = 32 gm/L.
Neurotoxicity: No information found
Other Studies:

Section 12 - Ecological Information

Bioaccumulation: Ehen released into the soil, this material is not expected to biodegrade. When released into the soil, this material may leach into groundwater.

Environmental Toxicity: This material is expected to be toxic to aquatic life.
Water flea Daphnia: EC50 > 10000 mg/L; 48 Hr.; Unspecified Bacteria: Phytobacterium phosphoreum: EC50 = 710 mg/L; 30 min; Microtox test Fish: Goldfish: LC50 > 5000 mg/L; 24 Hr.; Unspecified Fish: Guppy: LC50 > 1000 mg/L; 48 Hr.; Unspecified If released to water, 1, 2-propanediol is expected to degrade relatively rapidly via biodegradation. If released to soil, relatively rapid biodegradation should also occur. Significant leaching in soil can be predicted.

Section 13 - Disposal Considerations

Appropriate method of disposal of substance or preparation:
Handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved wasted facility.

Section 14 – Transport Information

DOT

Non-Regulated

Section 15 - Regulatory Information

Risk and Safety phrases

R21/22 Harmful in contact with skin and if swallowed
R36/38 Irritating to eyes and skin
R48/21/22 Harmful: danger of serious damage to health by prolonged exposure through in contact with skin and if swallowed

S3/7/9 Keep container closed in a cool, well-ventilated place
S24/25 Avoid contact with skin and eyes
S20/21 When using do not eat, drink or smoke
S2 Keep out of the reach of children.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28 After contact with skin, wash immediately with plenty of soap and water
S37/39 Wear suitable gloves and eye/face protection

The following component of this product is regulated as a toxic chemical under section 313 or Title III SARA, and 40 CFR 372: hydrochloric Acid CAS# 7647-01-0

Section 16 - Additional Information

MSDS Creation Date: May 11, 2012
Revision # 1 4/14/2014 YM/ MH 6/23/14

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