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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product	Propylene Glycol Food Grade	**Revision date**	2026-11-16
Version	1.0	**Brand**	Richest

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product name	Propylene Glycol Food Grade
Synonyms	propylene glycol; 1,2-propanediol; 57-55-6; propane-1,2-diol; 1,2-Propylene glycol; 1,2-dihydroxypropane
CAS No.	57-55-6
EC No.	200-338-0
Molecular formula	C3H8O2
Molecular weight	76.09 g/mol
Relevant identified uses	Food-grade humectant and solvent; Food, cosmetic and related formulations within the food-grade scope.
Uses advised against	No specific uses advised against were identified in the reviewed sources.
Company	Richest Group
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SECTION 2: Hazards identification

GHS Classification	Not classified
Pictogram(s)	None
Signal word	None
Hazard statement(s)	None
Precautionary statement(s)	None
Other hazards	Propylene glycol is a synthetic liquid substance that absorbs water. Propylene glycol is also used to make polyester compounds, and as a base for deicing solutions. Propylene glycol is used by the chemical, food, and pharmaceutical industries as an antifreeze when leakage might lead to contact with food.

SECTION 3: Composition/information on ingredients

Component	Propylene Glycol Food Grade
CAS No.	57-55-6
EC No.	200-338-0
Classification	Not classified
Concentration	≥99.80%

SECTION 4: First-aid measures	
If inhaled	IMMEDIATELY leave the contaminated area; take deep breaths of fresh air. If symptoms (such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop, call a physician and be prepared to transport the victim to a hospital. Provide proper respiratory protection to rescuers entering an unknown atmosphere.
In case of skin contact	IMMEDIATELY flood affected skin with water while removing and isolating all contaminated clothing. Gently wash all affected skin areas thoroughly with soap and water. If symptoms such as redness or irritation develop, IMMEDIATELY call a physician and be prepared to transport the victim to a hospital for treatment.
In case of eye contact	First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. IMMEDIATELY transport the victim after flushing eyes to a hospital even if no symptoms (such as redness or irritation) develop.
If swallowed	DO NOT INDUCE VOMITING. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and IMMEDIATELY call a hospital or poison control center. Be prepared to transport the victim to a hospital if advised by a physician. If the victim is convulsing or unconscious, do not give anything by mouth, ensure that the victim's airway is open and lay the victim on his/her side with the head lower than the body. DO NOT INDUCE VOMITING.
Most important symptoms and effects	No data available
Indication of immediate medical attention	Treat symptomatically. Show this safety data sheet to medical personnel.

SECTION 5: Fire-fighting measures	
Suitable extinguishing media	Water fog, alcohol foam, carbon dioxide, dry chemical.
Unsuitable extinguishing media	No data available
Special hazards arising from the chemical	This chemical is combustible. (NTP, 1992)
Advice for firefighters	Fire Extinguishing Agents: Water fog, alcohol foam, carbon dioxide, dry chemical. (USCG, 1999)

SECTION 6: Accidental release measures	
Personal precautions and emergency procedures	Avoid contact with the material. Ensure adequate ventilation. Wear appropriate personal protective equipment.
Environmental precautions	Prevent uncontrolled release to drains, soil and watercourses.
Methods for containment and cleaning up	Absorb liquid in sand or inert absorbent. Then store and dispose of according to local regulations.

SECTION 7: Handling and storage	
Precautions for safe handling	Avoid contact with skin and eyes. Avoid formation or inhalation of dust, mist or vapour as applicable. Wash thoroughly after handling.
Conditions for safe storage, including incompatibilities	Keep sealed, protected from light and ventilated at ≤40 °C and ≤50% relative humidity (food-grade COA); protect from moisture.

SECTION 8: Exposure controls/personal protection

Occupational exposure limit values	No data available
Biological limit values	No biological limit values were identified in the reviewed sources.
Appropriate engineering controls	Provide adequate ventilation. Eyewash facilities should be available where contact is possible.
Eye/face protection	Goggles. (USCG, 1999)
Skin and body protection	Goggles. (USCG, 1999)
Respiratory protection	Use suitable respiratory protection if exposure limits may be exceeded or dust, mist or vapour is generated.
Thermal hazards	No specific thermal hazards were identified in the reviewed sources; see Sections 5 and 10.

SECTION 9: Physical and chemical properties

Physical state	Colorless clear viscous liquid
Colour	Colorless viscous liquid
Odour	Practically odorless
Melting point / freezing point	-60 °C
Boiling point / boiling range	187 °C
Flammability	This chemical is combustible. (NTP, 1992)
Explosion / flammability limits	LEL: 2.6 % (NTP, 1992); UEL: 12.6 % (NTP, 1992)
Flash point	103 °C closed cup
Auto-ignition temperature	420 °C
Decomposition temperature	No data available
pH	No data available
Viscosity	0.581 cP at 20 °C
Solubility	Miscible with water, acetone, ethyl acetate and chloroform
Partition coefficient n-octanol/water	-0.92
Vapour pressure	0.11 hPa at 20 °C
Density and/or relative density	1.035-1.037 at 25/25 °C
Relative vapour density	2.62 (NTP, 1992) - Heavier than air; will sink (Relative to Air)
Particle characteristics	Not applicable (liquid).
Refractive index	Index of refraction: 1.4324 at 20 °C/D

SECTION 10: Stability and reactivity

Reactivity	Water soluble.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	PROPYLENE GLYCOL is hygroscopic. It is sensitive to excessive heat (tends to oxidize at high temperatures). This compound can react with oxidizing materials. It is incompatible with acid chlorides, acid anhydrides, chloroformates, and reducing agents. It dissolves many essential oils.

SECTION 10: Stability and reactivity

Conditions to avoid	NO open flames.
Incompatible materials	Reacts with strong oxidants, causing fire hazard.; Propylene glycol is incompatible with oxidizing reagents such as potassium permanganate.
Hazardous decomposition products	When heated to decomposition it emits acrid smoke and irritating fumes.

SECTION 11: Toxicological information

Acute toxicity	LD50 Rat oral 21000 - 33700 mg/kg; LD50 Rat oral 22,000 mg/kg; LD50 Rat ip 6660 mg/kg; LD50 Rat iv 6423 mg/kg
Toxicological summary	EXPOSURE. Propylene glycol (PG) production capacity in the US was 1312 million pounds (596 kilotons) in 1998. Domestic demand was 1050 million pounds (477 kilotons). PG is used as an ingredient in cosmetics at concentrations of <0.1% to >50%. Approximately 4000 cosmetic products contained PG in 1994.
Health effects	Liquid may irritate eyes. (USCG, 1999)

SECTION 12: Ecological information

Ecotoxicity	EC50; Species: Daphnia magna (Water flea, age 6-24 hr); Conditions: freshwater, static, 20 °C, pH > or =7.0; Concentration: >10000000 ug/L for 24, 48 hr; Effect: intoxication, immobilization /formulation/; EC50; Species: Selenastrum capricornutum (green algae); Concentration: 19,000 mg/L for 96 hr; Effect: 14-day growth rate /Conditions of bioassay not specified/
Persistence degradability	AEROBIC: Propylene glycol achieved 64% of its theoretical BOD using a sewage inoculum and a 5 day incubation period(1). A Warburg respirometer study employing a sewage seed showed that propylene glycol reached 78% of its theoretical BOD during a 40 day incubation period(2).
Bioaccumulative potential	An estimated BCF of 3 was calculated for propylene glycol(SRC), using a log Kow of -0.92(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).
Mobility in soil	The Koc of propylene glycol is estimated as 1(SRC), using a log Kow of -0.92(1) and a regression-derived equation(2). According to a classification scheme(3), this estimated Koc value suggests that propylene glycol is expected to have very high mobility in soil(SRC).
Other adverse effects	The rate constant for the vapor-phase reaction of propylene glycol with photochemically-produced hydroxyl radicals has been measured as 1.2X10-11 cu cm/molecule-sec at 25 °C(1). This corresponds to an atmospheric half-life of about 32 hours at an atmospheric concentration of 5X10+5 hydroxyl radicals per cu cm(1).
Environmental fate	TERRESTRIAL FATE: Based on a classification scheme(1), an estimated Koc value of 1(SRC), determined from a log Kow of -0.92(2) and a regression-derived equation(3), indicates that propylene glycol is expected to have very high mobility in soil(SRC).

SECTION 13: Disposal considerations

Product disposal methods	SRP: The most favorable course of action is to use an alternative chemical product with less inherent propensity for occupational harm/injury/toxicity or environmental contamination. Recycle any unused portion of the material for its approved use or return it to the manufacturer or supplier.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with local regulations.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	Not regulated as dangerous goods
UN Proper Shipping Name	Not regulated as dangerous goods
Transport hazard class(es)	Not regulated as dangerous goods
Packing group	Not regulated as dangerous goods
Environmental hazards / Marine pollutant	No
Special precautions for user	Keep containers closed and secured during transport. Follow local transport requirements.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	Workplace Environmental Exposure Level (WEEL): 8-hr Time-weighted Average (TWA) 10vmg/cu m.

SECTION 16: Other information

Full text of H-Statements	None
Revision date	2026-11-16
Version	1.0
References	Supplier technical documents, public SDS/COA/TDS and regulatory sources reviewed. Public data citations are listed below. Public data sources: PubChem Propylene Glycol (CID 1030): https://pubchem.ncbi.nlm.nih.gov/compound/1030
Abbreviations	CAS: Chemical Abstracts Service; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; SDS: Safety Data Sheet.
Disclaimer	The information in this SDS applies to the specified product and is provided in good faith based on information available to Richest Group at the date of issue. It describes health, safety and environmental requirements and does not constitute a guarantee of product properties. Users must assess suitability and comply with applicable regulations.