

SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME	PROPYLENE GLYCOL, USP
PRODUCT CODE	0510
SUPPLIER	MEDISCA Inc. Tel.: 1.800.932.1039 Fax.: 1.855.850.5855 626 Tom Miller Road, Plattsburgh, NY, 12901 MEDISCA Pharmaceutique Inc. Tel.: 1.800.665.6334 Fax.: 514.338.1693 4509 Rue Dobrin, St. Laurent, QC, H4R 2L8 MEDISCA Australia PTY LTD Tel.: 1.300.786.392 Fax.: 61.2.9700.9047 Unit 7, Heritage Business Park 5-9 Ricketty Street, Mascot, NSW 2020
EMERGENCY PHONE	CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 NSW Poisons Information Centre: 131 126 National Chemical Emergency Centre 44(0)1235239670
RECOMMENDED USES	Pharmaceutical Manufacturing
RESTRICTIONS ON USE	Not applicable

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION	Based on available data, the classification criteria are not met.			
PICTOGRAM	Not Applicable			
SIGNAL WORD	Not applicable			
HAZARD STATEMENT(S)	Not applicable			
ADVERSE PHYSIOCHEMICAL, HUMAN HEALTH AND ENVIRONMENTAL EFFECTS	Not applicable			
PRECAUTIONARY STATEMENT(S)	Prevention	Not applicable		
	Response	Not applicable		
	Storage	Not applicable		
	Disposal	Not applicable		
HMS CLASSIFICATION	Health Hazard	0	Flammability	1
	Reactivity	0	Personal Protection	B

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	1,2-Propanediol
BOTANICAL NAME	Not applicable

SYNONYM	1,2 - Dihydroxypropane, PG 12, Methylethylene glycol
CHEMICAL FORMULA	C ₃ H ₈ O ₂
CHEMICAL FAMILY	Linear aliphatic derivative
CAS NUMBER	57-55-6
ALTERNATE CAS NUMBER	Not applicable
MOLECULAR WEIGHT	76.09
COMPOSITION	

CHEMICAL NAME	CAS NUMBER	EC NUMBER	% BY WEIGHT
PROPYLENE GLYCOL	57-55-6	200-338-0	100

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as health hazards and hence require reporting in this section.

SECTION 4: FIRST-AID MEASURES

IN CASE OF EYE CONTACT	Flush with copious amounts of water for 15 minutes, separating eyelids with fingers. If irritation persists seek medical aid.
IN CASE OF SKIN CONTACT	Wash with soap & water for 15 minutes. If irritation persists seek medical aid.
IF SWALLOWED	Call a physician. Wash out mouth with water. Do not induce vomiting without medical advice.
IF INHALED	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
MEDICAL ATTENTION AND SPECIAL TREATMENT	Get emergency medical help.
SYMPTOMS CAUSED BY EXPOSURE	Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 5: FIREFIGHTING MEASURES

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL	No unusual fire or explosion hazards noted.
FLAMMABLE PROPERTIES	May be combustible at high temperature.
HAZARDOUS COMBUSTION PRODUCTS	Under fire conditions, hazardous fumes will be present.
SUITABLE & UNSUITABLE EXTINGUISHING MEDIA	Small fire: dry chemical, CO ₂ or water spray. Large fire: dry chemical, CO ₂ , alcohol resistant foam or water spray. Do not get water inside containers.
PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
METHODS & MATERIAL FOR CONTAINMENT	On land, sweep or shovel into suitable containers.

CLEANUP PROCEDURE

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Shut off all sources of ignition. Evacuate the area. If necessary, employ water fog to disperse the vapors. Absorb the matter with compatible vermiculite or other absorbing material. Place in a suitable container and retain for disposal. Ventilate and clean the affected area. Do not flush into sewerage system or to drains.

REFERENCE TO OTHER SECTIONS

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE
PRECAUTIONS FOR SAFE HANDLING

Do not inhale. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling. Store away from incompatible materials, in a well-ventilated area. Eliminate all sources of ignition. Store in accordance with local regulations. Do not store in unlabeled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination.

CONDITIONS FOR SAFE STORAGE

Store away from incompatible materials, in a well-ventilated area. Eliminate all sources of ignition. Store in accordance with local regulations. Do not store in unlabeled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination.

STORAGE CONDITIONS

Store in original container, tightly sealed, protected from direct sunlight and moisture.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Chemical Name: PROPYLENE GLYCOL CAS #: 57-55-6

	Country	Limit value-8 hours		Limit value-Short Term		IDLH	REL	Advisory	Notes
		ppm	mg/m ³	ppm	mg/m ³				
OSHA	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
ACGIH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
NIOSH	USA	N/L	N/L	N/L	N/L	N/L	N/L	N/A	N/A
WEEL	USA	N/L	10	N/L	N/L	N/L	N/L	N/A	N/A
HSIS	Australia	150	474	N/L	N/L	N/L	N/L	N/A	Total vapour and particulates
HSE	UK	150	474	N/L	N/L	N/L	N/L	N/A	Total vapour and particulates
GESTIS	Canada-Ontario	50	155	N/L	N/L	N/L	N/L	N/A	Total vapour and particulates
GESTIS	Ireland	150	470	N/L	N/L	N/L	N/L	N/A	Total vapour and particulates
GESTIS	New Zealand	150(1)	474	N/L	N/L	N/L	N/L	N/A	(1) particulates only Total vapour and particulates
GESTIS	Norway	25	79	N/L	N/L	N/L	N/L	N/A	Total vapour and particulates
GESTIS	South Africa Mining	150	474	N/L	N/L	N/L	N/L	N/A	Total vapour and particulates

N/L = Not listed ; N/A = Not Available

PELs are 8-hour TWAs = Limit value - Eight hours

Ceiling or Short-Term TWA = STEL = Limit value - Short term

EXPOSURE GUIDELINES	Consult local authorities for provincial or state exposure limits. Particulates not otherwise regulated, respirable fraction: 5 mg/m ³
PERSONAL PROTECTIVE EQUIPMENT	Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by WHMIS or OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to minimize contact with skin. Respirators: Follow WHMIS or OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Thermal Hazards: For products representing a thermal hazard, appropriate Personal Protective Equipment should be used.
SPECIFIC ENGINEERING CONTROLS	Adequate mechanical ventilation. Fumehood, eye wash station, and safety shower.
BIOLOGICAL MONITORING	Not available
CONTROL BANDING	Not available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid				
DESCRIPTION	Clear, colorless, viscous liquid. Is practically odorless. Absorbs moisture when exposed to moist air.				
SOLUBILITY	Miscible with water, with acetone, and with chloroform. Soluble in ether and will dissolve many essential oils, but is immiscible with fixed oils.				
ODOR	Odorless				
FLAMMABILITY	Combustible				
AUTO-IGNITION TEMPERATURE	371.11°C, 700°F	BOILING POINT	188.2°C, 370.76°F	DECOMPOSITION TEMPERATURE	Not available
EVAPORATION RATE	Not available	EXPLOSIVE LIMIT	2.6 - 12.5	FLASH POINT	104°C, 219.2°F (closed cup), 107.2 °C, 225.0 °F (Open Cup)
log P (OCTANOL-WATER)	- 1.07	LOWER FLAMMABLE/EXPLOSIVE LIMIT(S)	2.6 %(V) (Estimated)	MELTING/FREEZING POINT	-59°C, -74.2°F
PARTICLE CHARACTERISTICS	Not available	OXIDIZING PROPERTY	Not available	pH	Not available
RELATIVE DENSITY (WATER = 1)	1.03 (20°C)	SPECIFIC GRAVITY	Not available	UPPER FLAMMABLE/EXPLOSIVE LIMIT(S)	12.5 %(V) (Estimated)
VAPOR DENSITY (AIR = 1)	2.62	VAPOR PRESSURE	20 Pa (25°C)	VISCOSITY	48.6 mPa·s (25°C)

The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY	Reacts violently with strong oxidants and alkalis. This generates fire hazard.
CHEMICAL STABILITY	Stable under recommended storage conditions.

INCOMPATIBLE MATERIALS	Strong oxidizing agents. Strong acids. Reducing agents. Caustics. Aliphatic amines. Isocyanates. Acid chlorides. Acid anhydrides. Chloroformates. Mercaptans. Bases.
HAZARDOUS DECOMPOSITION PRODUCTS	Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides and other gases may occur.
HAZARDOUS POLYMERIZATION	Will not occur.
POSSIBILITY OF HAZARDOUS REACTION	Not established.
CONDITIONS TO AVOID	Moisture, sunlight and extreme temperatures.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY	Oral: Rat: LD50: (mg/kg): 22000 Dermal: Rabbit: LD50: (mg/kg): > 2000 (No deaths occurred at this concentration) Inhalation: Rat: LC50: (mg/L/4hr): 317.042 (No deaths occurred at this concentration)
SKIN CORROSION/IRRITATION	Harmful in contact with skin. Repeated contact may cause flaking and softening of skin. Prolonged contact is essentially nonirritating to skin.
SERIOUS EYE DAMAGE/EYE IRRITATION	May cause slight temporary eye irritation. Corneal injury is unlikely. Mist may cause eye irritation.
RESPIRATORY SENSITIZATION	Due to lack of data the classification is not possible.
SKIN SENSITIZATION	Based on available data, the classification criteria are not met. Did not cause allergic skin reactions when tested in humans.
GERM CELL MUTAGENICITY	Based on available data, the classification criteria are not met. Mutagenicity: Cytogenetic study: Result: Positive: Species: Mouse: Organ: Fibroblast
CARCINOGENICITY	OSHA PROPYLENE GLYCOL is not listed. NTP PROPYLENE GLYCOL is not listed. IARC PROPYLENE GLYCOL is not evaluated. California Proposition 65 This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.
ADDITIONAL CARCINOGENICITY INFORMATION	Based on available data, the classification criteria are not met. 0.17 - 0.35 mg/l Carcinogenicity, Inhalation: Result: LOAEL=3.5 mg/L Species: Rat
REPRODUCTIVE TOXICITY	Based on available data, the classification criteria are not met. In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	Based on available data, the classification criteria are not met. Evaluation of available data suggests that this material is not an STOT-SE toxicant.
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	Based on available data, the classification criteria are not met. In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.
ASPIRATION HAZARDS	Based on physical properties, not likely to be an aspiration hazard.
SIGNS AND SYMPTOMS OF EXPOSURE	ROUTES OF EXPOSURE: Oral, Dermal, Inhalation, Eye contact EARLY ONSET SYMPTOMS RELATED TO EXPOSURE: Not available DELAYED HEALTH EFFECT FROM EXPOSURE: Not available Symptoms related to the physical, chemical, and toxicological characteristics: Headache. Dizziness. Gastrointestinal disturbances.

POTENTIAL HEALTH EFFECTS	Inhalation	At room temperature, exposure to vapor is minimal due to low volatility. Mildly irritating to the respiratory tract.
	Ingestion	Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. Ingestion of large amounts could cause metabolic acidosis.
	Skin	Prolonged skin contact is unlikely to result in absorption of harmful amounts. Prolonged contact is essentially nonirritating to skin. Repeated contact may cause flaking and softening of skin.
	Eyes	Corneal injury is unlikely. May cause slight temporary eye irritation. Mist may cause eye irritation.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY	EC50: 48 Hr: Crustacea: Daphnia magna: (mg/L): > 10000 LC50: 96 Hr: Fish: (mg/L): >100 mg/L (in the most sensitive species tested) EC50: 72 Hr: Algae: (mg/L): Not available
PERSISTENCE AND DEGRADABILITY	Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Biodegradation may occur under anaerobic conditions (in the absence of oxygen). Biodegradation: 81%; Exposure time: 28 d; Method: OECD Test Guideline 301F Biodegradation: 96%; Exposure time: 64d; Method: OECD Test Guideline 306 or Equivalent
BIOACCUMULATIVE POTENTIAL	Low. (BCF < 100 or Log Pow < 3) Log Pow: -1.07 (Measured) Bioconcentration factor (BCF): 0.09 (Estimated)
MOBILITY IN SOIL	Water Solubility: 1.00E+06 mg/L (20°C) Henry's Law Constant: 1.29E-08 atm-m ³ /mole (25°C) Potential for mobility in soil is very high (Koc between 0 and 50). Partition coefficient (Koc): < 1 (Estimated) Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process. Potential for mobility in soil is very high.
OTHER ADVERSE EFFECTS	The product contains volatile organic compounds which have a photochemical ozone creation potential. This product is not intended to be released into the environment

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHODS	Dispose of in accordance with federal / local laws and regulations. Avoid release into the environment.
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SECTION 14: TRANSPORT INFORMATION

UN PROPER SHIPPING NAME	Not dangerous good
UN NUMBER	Not applicable
CLASS	Not applicable
PACKING GROUP	Not applicable

AUSTRALIA

HAZCHEM	Not applicable
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EU

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not Listed

ENVIRONMENTAL HAZARDS

Not available

SPECIAL SHIPPING INFORMATION

Not applicable

SECTION 15: REGULATORY INFORMATION

UNITED STATES REGULATIONS

Chemical Name & CAS	CERCLA 40 CFR Part 302.4	SARA (Title III) 40 CFR Part 372.65	EPA 40 CFR Part 355		Pennsylvania	Right-to-know		California Prop 65
			Appendix A	Appendix B		New Jersey	Massachusetts	
PROPYLENE GLYCOL, USP 57-55-6	N/L	N/L	N/L	N/L	X	X	N/L	N/L

N/L = Not Listed; X = Listed

AUSTRALIAN REGULATIONS

Chemical Name & CAS	Poisons and Therapeutic Goods	Therapeutic Goods Act	Code of Practices - Illicit Drug Precursors	Poisons Standard	Work Health and Safety Regulations	Inventory of Industrial Chemicals
PROPYLENE GLYCOL, USP 57-55-6	N/L	N/L	N/L	N/L	N/L	N/L

N/L = Not Listed

EU REGULATIONS

Chemical Name & CAS	REACH ANNEX XVII	REACH ANNEX XIV	EC 1005/2009	EC 850/2004	EC 1107/2009	PIC - Prior Informed Consent Regulation	EC 2012/18
PROPYLENE GLYCOL, USP 57-55-6	N/L	N/L	N/L	N/L	N/L	N/L	N/L

N/L = Not Listed; X = Listed

Any EU regulation not listed above is not applicable to this product.

SUBJECT TO INTERNATIONAL AGREEMENT

Not applicable

SECTION 16: OTHER INFORMATION

REFERENCES

Available upon request

ABBREVIATIONS AND ACRONYMS

ACGIH - American Conference of Governmental Industrial Hygienists; **AIHA WEEL** – American Industrial Hygiene Association Workplace Environment Exposure Levels; **CAESAR** – Computer Assisted Evaluation of industrial chemical Substances According to Regulations; **CAS** – Chemical Abstract Service; **CERCLA** – Comprehensive Environmental Response, Compensation, and Liability Act; **EC50** – Effective Concentration, 50%; **EPA** – Environmental Protection Agency; **GHS** – Global Harmonized System; **HMIS** – Hazardous Materials Information System; **HSE** – Health and Safety Executive; **HSIS** – Hazardous Substances Information System; **IARC** – International Agency for Research on Cancer; **IDLH** - Immediately Dangerous to Life or Health; **IRFMN** – Ready Biodegradability Model; **ISS** – Istituto Superiore Sanità; **LC50** – Lethal Concentration, 50%; **LD50** – Lethal Dose, 50%; **MSHA** - Mine Safety and Health Administration; **NIOSH** – National Institute for Occupational Safety and Health; **NTP** – National Toxicology Program; **OSHA PEL** – Occupational Safety & Health Administration Permissible Exposure Limits; **QSAR** – Quantitative Structure-activity relationship; **REL** - Recommended Exposure Limit; **SARA** – Superfund Amendments and Reauthorization Act; **STEL** – Short Term Exposure Limit; **TLV** – Threshold Limit Value; **TWA** – Time Weighted Average; **WHMIS** – Workplace Hazardous Materials Information System

LAST REVISION

08/2025

SUPERSEDES

04/2023

For a list of changes to the SDS since the last version, please communicate with MEDISCA at www.medisca.com

DISCLAIMER

This document was created in accordance with OSHA, Safe Work Australia and WHMIS regulations. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. MEDISCA® shall not be held liable for any damage resulting from handling or from contact with the above product. Recipients of the product must take responsibility for observing existing laws and regulations.

SUPPLEMENTARY INFORMATION

For all country specific requirements not outlined on this Safety Data Sheet, please request Supplementary Page to this Safety Data Sheet.