ESSENTIAL CHEMISTRY. INNOVATIVE SOLUTIONS.

SAFETY DATA SHEET

Print Date: July 30, 2025

Section 1: Product & Company Information

Product Identifier: **Propylene Glycol 40-100% (USP, USPK, Bio-Based)**

Other Means of Identification
Product Number: 152502
152503
152514
152522
152524

Recommended Use and Restrictions on Use
Recommended Use: Solvent, Carrier, Intermediate
Restrictions on Use: No data available.

Manufacturer / Importer / Supplier / Distributor Information
Company Name: CORECHEM Inc.
Address: 4320 Greenway Drive
Knoxville, TN 37918 USA

Information Telephone Number: 1-865-524-4239
Fax Number: 1-865-524-3375
Website: www.corechemInc.com
Contact Person: Regulatory Manager
E-mail: regulatory@corechemInc.com

Emergency Phone Number: Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 *(monitored 24 hours/day)*

Section 2: Hazards Identification

GHS Hazard Classification(s)
Not classified as hazardous according to OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

Label Elements
Signal Word
WARNING

Section 3: Composition/Information on Ingredients

Substance

Chemical Identity [2]	Common Name/Synonym(s)	CAS # [3]	Weight %	Impurity or Stabilizing Additive
Propylene Glycol	PG, Methyl Ethyl Glycol, 1, 2-Dihydroxypropane	57-55-6	40 – 100%	No

1. Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
3. "—"Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

Section 4: First-Aid Measures

General Information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wash contaminated clothing before reuse.

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if breathing becomes difficult or respiratory irritation develops.

Skin Contact
Wash with soap and plenty of water. Consult a physician if irritation develops or persists. Wash contaminated clothing before reuse.

Eye Contact
Flush with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if irritation develops or persists. Rinse thoroughly with plenty of water, also under the eyelids.

Ingestion
Wash out mouth with water, then drink water to dilute. Never give anything by mouth to an unconscious person. Seek medical attention if symptoms develop.

Most important symptoms/effects, acute and delayed
Symptoms
Eyes: Contact with eyes may cause irritation.

Skin: May cause slight skin irritation. Repeated exposure may cause skin dryness or cracking. Contact with product at elevated temperatures can result in thermal burns.
Inhalation: Avoid breathing vapors or mists. Inhalation of aerosol may cause irritation to respiratory tract.
Ingestion: Health injuries are not known or expected under normal use. May be harmful if swallowed. (dependent on amounts)

Indication of immediate medical attention and special treatment needed

Hazards

No data available.

Treatment

Symptomatic and supportive therapy as required.

Section 5: Fire-Fighting Measures

General Fire Hazards

No data available.

Suitable (and Unsuitable) Extinguishing Media

Suitable Extinguishing Media

Dry powder. Alcohol-resistant foam. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

Jet water spray may cause frothing and splattering of burning material.

Specific Hazards Arising from the Chemical

Material may be ignited only if preheated to high temperatures (i.e. in fire conditions). Vapors can be ignited at or above the flash point. The vapor is heavier than air and may travel along the ground; distant ignition is possible. Container holding this material may explode in the heat of a fire. Empty containers may still contain residual material than can ignite and/or result in explosion. Produces oxides of carbon upon combustion.

Special Protective Equipment and Precautions for Firefighters

Special Fire-Fighting Equipment Procedures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Special Protective Equipment for Fire-Fighters

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Evacuate spill area. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Stay upwind and keep out of low area. Remove all possible sources of ignition in the surrounding area. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment. Ventilate contaminated area thoroughly shut off leaks if possible without personal risk.

Methods and Materials for Containment and Clean-Up

Air release: Vapors may be suppressed by the use of water fog. Contain all liquid for treatment and/or disposal as a potential hazardous waste.
Water release: This material is miscible in water. Notify all downstream users of possible contamination. Divert water flow around spill if possible and safe to do so.
Land release: Create dike or trench to contain spilled material. Absorb spilled product with inert material such as dry sand, clay, vermiculite, or other commercial absorbent. Place in a sealable, properly labeled container. Store in safe location until disposal. Wash area with soap and water.
Refer to Section 8 for personal protection advice and Section 13 for disposal information.

Notification Procedures

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions

Use appropriate containment of product and firefighting water to avoid environmental contamination. Prevent from spreading or entering drains, ditches, or rivers by using sand, earth, or other appropriate barriers.

Section 7: Handling and Storage

Precautions for Safe Handling

Use caution when handling/transferring. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe mist or vapor. Use only with adequate ventilation. Wear appropriate personal protective equipment. Transfer and storage systems should be compatible. Observe good industrial hygiene practices.

Conditions for Safe Storage, including any Incompatibilities

Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials (See Section 10). Ensure that all local regulations regarding handling and storage facilities are followed.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Value	Source
Propylene Glycol	-	10 mg/m^3	US. ACGIH Threshold Limit Values

Biological Limit Values

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

Appropriate Engineering Controls

Provide explosion-proof ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below.

Individual protection measures, such as personal protective equipment (PPE)

General Information

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Eye/Face Protection

Wear safety glasses with side shields.

Skin Protection

Hand Protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing. Long sleeved clothing. Special protective equipment is generally not required.

Respiratory Protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information

Hygiene Measures

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

Section 9: Physical and Chemical Properties

Appearance:	
Physical State:	Liquid
Color:	Colorless
Odor:	Sweet
Odor Threshold:	No data available.
pH:	~7
Melting Point/Freezing Point:	-76 °F
Initial Boiling Point and Boiling Range:	250 – 370 °F
Flash Point:	103 °C (217 °F) - closed cup
Evaporation Rate (butyl acetate=1)**:**	No data available.
Flammability (solid, gas):	No data available.
Upper/Lower Limit on Flammability or Explosive Limits	
Flammability Limit – Upper:	3 % (V)
Flammability Limit – Lower:	13% (V)
Explosive Limit – Upper:	Not applicable.
Explosive Limit – Lower:	Not applicable.
Vapor Pressure:	<1
Vapor Density (air =1)**:**	1.2 – 2.6
Relative Density (water=1)**:**	1.04 g/cm3 at 25 °C (77 °F)
Solubility(ies):	
Solubility in water:	Completely Soluble.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	-1.07
Auto-Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Viscosity:	No data available.

Other Information:

Molecular Weight:	76.09 g/mol
Formula:	$C_3H_8O_2$

Section 10: Stability and Reactivity

Reactivity

Reacts with strong oxidants, causing fire hazard.

Chemical Stability

The chemical is stable at recommended storage conditions. It is not sensitive to static discharge or mechanical shock. Hazardous polymerization will not occur.

Possibility of Hazardous Reactions

Explosive in the form of vapor when exposed to heat or flame. May react with hydrofluoric acid, nitric acid, and silver nitrate to form the explosive silver fulminate.

Conditions to Avoid

Avoid heat, sparks, open flames, sunlight, and other sources of ignition.

Incompatible Materials

Strong oxidizing agents. Acid chlorides, Acid anhydrides, Chloroformates, and Reducing agents.

Hazardous Decomposition Products

On combustion, this material forms oxides of carbon. Thermal decomposition can lead to release of irritating gases and vapors.

Section 11: Toxicological Information

Information on routes of exposure

Ingestion: Health injuries are not known or expected under normal use. May be harmful if swallowed. (dependent on amounts).
Inhalation: Avoid breathing vapors or mists. Inhalation of aerosol may cause irritation to respiratory tract.
Skin Contact: May cause slight skin irritation. Repeated exposure may cause skin dryness or cracking. Contact with product at elevated temperatures can result in thermal burns.
Eye Contact: This material may cause irritation but is not expected to cause serious/permanent eye damage.

Information on Toxicological Effects

Acute Toxicity (List all possible routes of exposure)

Oral

Propylene Glycol: LD50 (Rat): 20,000 mg/kg

Dermal

Propylene Glycol: LD50 (Rabbit): 28,000 mg/kg

Inhalation

No data available.

Repeated Dose Toxicity

No data available.

Skin Corrosion/Irritation

This material may cause mild irritation but is not expected to cause serious/permanent damage to the skin.

Serious Eye Damage/Eye Irritation

This material may cause irritation but is not expected to cause serious/permanent eye damage.

Respiratory/Skin Sensitization

This material may cause mild irritation but is not expected to cause serious/permanent damage.

Carcinogenicity

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

US. National Toxicology Program (NTP) Report on Carcinogens

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Germ Cell Mutagenicity

In Vitro

No mutagenic components identified.

In Vivo

No mutagenic components identified.

Reproductive Toxicity

None known.

Specific Target Organ Toxicity – Single Exposure

None known.

Specific Target Organ Toxicity – Repeated Exposure

None known.

Aspiration Hazard

Not classified.

Other Effects

None known.

Section 12: Ecological Information

Ecotoxicity

Acute Hazards to the Aquatic Environment

Fish

Propylene Glycol: LC50: 96h 51600mg/L (Oncorhynchus mykiss) static
Propylene Glycol: LC50: 96h 41 - 47mL/L (Oncorhynchus mykiss) static
Propylene Glycol: LC50: 96h 51400mg/L (Pimephales promelas) static
Propylene Glycol: LC50: 96h 710mg/L (Pimephales promelas)

Aquatic Invertebrates

Propylene Glycol: NOEC (Water Flea (Pseudomonas putida), 48 h): 20,000 mg/l mortality
Propylene Glycol: EC50 (Water Flea (Daphnia Magna), 48 h): > 10,000 mg/l

Toxicity to Aquatic Plants

Propylene Glycol: EC50: 96h 19000 mg/L (Pseudokirchneriella subcapitata)

Chronic Hazards to the Aquatic Environment

Fish

No data available.

Aquatic Invertebrates

No data available.

Toxicity to Aquatic Plants

No data available.

Persistence and Degradability

Biodegradation

Expected to be readily biodegradable.

BOD/COD Ratio

No data available.

Bio-accumulative Potential

Bioconcentration Factor (BCF)

.09

Partition Coefficient n-octanol / water (log Kow)

Log Kow: -1.07

Mobility in Soil

Expected to have a very high mobility in soil.

Other Adverse Effects

No data available.

Section 13: Disposal Considerations

Disposal Instructions

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Contaminated Packaging

Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.

Section 14: Transportation Information

US Department of Transportation (DOT)

This material is not regulated as a hazardous material for transport by the U.S. Department of Transportation in accordance with 49 CFR 172.101.

Section 15: Regulatory Information

US Federal Regulations

Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.
Propylene Glycol (57-55-6)

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

Emergency Planning and Community Right-To-Know Act (EPCRA)

EPCRA 302 Extremely Hazardous Substance

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

EPCRA 304 Emergency Response Notification

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

EPCRA 311/312 Emergency and Hazardous Materials Reporting

Fire Hazard:	No
Sudden Release of Pressure:	No
Reactive:	No
Acute (Immediate) Health Hazard:	Yes
Chronic (Delayed) Health Hazard:	No

EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

This material does not contain any chemical(s) with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

Section 16: Other Information

Hazardous Materials Identification System (HMIS®) Classification

Health Hazard: 1
Chronic Health Hazard: /
Flammability: 0
Physical Hazard: 0
Personal Protection: B
(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

National Fire Protection Association (NFPA 704) Rating

Health Hazard: 1
Fire Hazard: 0
Reactivity Hazard: 0
Special: N/A
(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

Prepared By:	Regulatory Manager
Version #:	001
Issue Date:	August 4, 2015
Last Revised By:	Regulatory Assistant C
Last Revision Date:	5/15/2023
Current Revision:	02
Sections Revised:	2-4, 5, 8-12, 16

Key to Abbreviations and Acronyms

ATE - Acute Toxicity Estimate
BCF - Bioconcentration Factor
EC50 - Effective concentration, 50%
IDHL – Immediately Dangerous to Life and Health
Kg – Kilogram
l – Liter
lb – Pound
LC50 - Lethal Concentration, 50%
LD50 - Lethal Dose, 50%
mg - milligram
ml – milliliter
N/A – Not Applicable
N/D – Not Determined
PEL – Permissible Exposure Limit
REL – Recommended Exposure Limit
STEL – Short-term Exposure Limit
TWA - Time weighted average
ACGIH - American Conference of Industrial Hygienists
AIHA – American Industrial Hygiene Association
BEI - Biological Exposure Indices
CAS – Chemical Abstracts Service
DOT – US Department of Transportation
EPA – US Environmental Protection Agency
GHS - Globally Harmonized System of Classification and Labelling of Chemicals
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IBC - Intermediate Bulk Container
IMDG - International Maritime Dangerous Goods
NIOSH – National Institute for Occupational Safety and Health
NTP – National Toxicology Program
OSHA – US Occupational Health and Safety Administration
SARA – US EPA Superfund Amendments and Reauthorization Act
TSCA – US EPA Toxic Substances Control Act
UN - United Nations

References

HSDB® - Hazardous Substances Data Bank

Disclaimer

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