

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Propylene Glycol

Other means of identification

Product Code(s) 0575

Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended Use For Further Manufacturing Use Only.

Uses advised against Not for Human or Animal Drug Use

Details of the supplier of the safety data sheet

Company Address

VWR International, LLC
 Radnor Corporate Center
 100 Matsonford Road
 Radnor, PA 19087-8660

Manufacturer Address

VWR International, LLC
 28600 Fountain Parkway
 Solon, Ohio 44139

Company Phone Number 1-800-448-4442

E-mail Address info@amresco-inc.com

Emergency Telephone Number

Emergency Telephone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122)

Label elements

Emergency Overview

Appearance Clear Colorless

Physical State Viscous liquid

Odor No information available

Hazards not otherwise classified (HNOC)

Not regulated

Other Information

Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | EC No. | Weight % | Trade Secret |
|------------------|---------|-----------|----------|----------------|
| Propylene Glycol | 57-55-6 | 200-338-0 | 95-100 | Not applicable |

4. FIRST AID MEASURES

First Aid Measures

| | |
|---------------------|----------------------------------------------------------------------------------------------------------------------|
| Eye Contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin Contact | Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. |
| Inhalation | Move to fresh air. If not breathing, give artificial respiration. |
| Ingestion | Never give anything by mouth to an unconscious person. Rinse mouth. |

Most important symptoms and effects, both acute and delayed

Most Important Symptoms/Effects No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal protection Ensure adequate ventilation, especially in confined areas.

Environmental Precautions

Environmental Precautions See Section 12 for additional Ecological information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Absorb with sand or vermiculite. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Handle in accordance with good industrial hygiene and safety practice. Hygroscopic.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Hygroscopic.

Incompatible Products Strong oxidizing agents. Acid chlorides. Anhydrides. Chloroformates. Reducing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters**

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-----------------------------|-----------|----------|------------|
| Propylene Glycol 57-55-6 | - | - | - |

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Avoid contact with eyes. Safety glasses with side-shields.

Skin and Body Protection Wear protective gloves/clothing.

Respiratory Protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Physical State | Viscous liquid | Odor | No information available |
| Appearance | Clear Colorless | Odor Threshold | No information available |
| Color | No information available | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|-------------------------------------|--------------------------|-------------------------|
| pH | No information available | |
| Melting point/freezing point | -59 °C | |
| Boiling Point/Range | 188.2 °C | |
| Flash Point (High in °C) | No information available | |
| Evaporation Rate | No information available | |
| Flammability (solid, gas) | No information available | |
| Flammability Limit in Air | | |
| Upper flammability limit: | No information available | |
| Lower flammability limit: | No information available | |
| Vapor pressure | No information available | |
| Vapor Density | No information available | |
| Specific Gravity | 1.0361 | |
| Water Solubility | No information available | |
| Solubility in other solvents | No information available | |
| Partition coefficient | No information available | |
| Autoignition Temperature | No information available | |
| Decomposition Temperature | No information available | |
| Kinematic viscosity | No information available | |

Dynamic viscosity No information available
 Explosive Properties No information available
 Oxidizing Properties No information available

Other Information

Softening Point No information available
 Molecular Weight No information available
 VOC Content No information available
 Density No information available
 Bulk Density No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Hygroscopic.

Incompatible Materials

Strong oxidizing agents. Acid chlorides. Anhydrides. Chloroformates. Reducing agents.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation There is no data available for this product.
Eye Contact There is no data available for this product.
Skin Contact There is no data available for this product.
Ingestion There is no data available for this product.

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------------------------|-------------------|--------------------------|-----------------|
| Propylene Glycol 57-55-6 | = 20 g/kg (Rat) | = 20800 mg/kg (Rabbit) | - |

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenicity No information available.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|-----------------------------|-------|------|-----|------|
| Propylene Glycol 57-55-6 | - | - | - | - |

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity
 The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION**Ecotoxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

| Chemical Name | Algae/aquatic plants | Toxicity to Fish | Crustacea |
|-----------------------------|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Propylene Glycol 57-55-6 | 19000: 96 h Pseudokirchneriella subcapitata mg/L EC50 | 51600: 96 h Oncorhynchus mykiss mg/L LC50 static 51400: 96 h Pimephales promelas mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static | 1000: 48 h Daphnia magna mg/L EC50 Static 10000: 24 h Daphnia magna mg/L EC50 |

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

| Chemical Name | Partition coefficient |
|-----------------------------|-----------------------|
| Propylene Glycol 57-55-6 | - |

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Waste Disposal Method**

Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging

Do not re-use empty containers.

| Chemical Name | RCRA - Halogenated Organic Compounds | RCRA - P Series Wastes | RCRA - F Series Wastes | RCRA - K Series Wastes |
|-----------------------------|--------------------------------------|------------------------|------------------------|------------------------|
| Propylene Glycol 57-55-6 | - | - | - | - |

| Chemical Name | California Hazardous Waste Status |
|-----------------------------|-----------------------------------|
| Propylene Glycol 57-55-6 | - |

14. TRANSPORT INFORMATION**DOT**

Not regulated

IATA

Not regulated

15. REGULATORY INFORMATION**International Inventories****TSCA**

Complies

DSL/NDSL

Complies

| | |
|----------------------|----------|
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Component | SARA 313 - Threshold Values % |
|----------------------------------------|-------------------------------|
| Propylene Glycol 57-55-6 (95-100) | - |

SARA 311/312 Hazard Categories

| | |
|------------------------------------------|----|
| Acute Health Hazard | No |
| Chronic Health Hazard | No |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|-----------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Propylene Glycol 57-55-6 | - | - | - | - |

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|-----------------------------|--------------------------|------------------------------------|----|
| Propylene Glycol 57-55-6 | - | - | - |

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

| Chemical Name | California Prop. 65 |
|----------------------------|---------------------|
| Propylene Glycol - 57-55-6 | - |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|-----------------------------|------------|---------------|--------------|
| Propylene Glycol 57-55-6 | X | - | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not regulated

16. OTHER INFORMATION

Issuing Date 31-Dec-2009

Revision Date 08-Jan-2016

Revision Note

No information available

Disclaimer

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. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

End of Safety Data Sheet