SECTION 1: Identification

1.1. Identification
Product form: Substance
Substance name: Propylene Glycol Industrial
Chemical name: 1,2-Propanediol
CAS-No.: 57-55-6
Formula: C3H8O2
Synonyms: 1,2-dihydroxypropane, 1,2-propanediol, propylene glycol, monopropylene glycol

1.2. Recommended use and restrictions on use
Use of the substance/mixture: Intermediate
Solvent
Functional fluids

1.3. Supplier

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Atlanta Branch Office</th>
<th>Ocoee Branch Office</th>
<th>Spartanburg Branch Office</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whitaker Oil Company</td>
<td>Whitaker Oil Company</td>
<td>Whitaker Chemicals LLC</td>
<td></td>
</tr>
<tr>
<td>1557 Marietta Road NW</td>
<td>280 Enterprise Street</td>
<td>405 John Dodd Road</td>
<td></td>
</tr>
<tr>
<td>Atlanta, GA 30318</td>
<td>Ocoee, FL 34761</td>
<td>Spartanburg, SC 29303</td>
<td></td>
</tr>
<tr>
<td>404-355-8220 (t)</td>
<td>407-656.0088 (t)</td>
<td>864-578-6968 (t)</td>
<td></td>
</tr>
<tr>
<td>404-355-2436 (l)</td>
<td>407-877-8335 (l)</td>
<td>864-578-6864 (l)</td>
<td></td>
</tr>
</tbody>
</table>

WEBSITE: www.whitakeroil.com  EMAIL: SDS@whitakeroil.com

1.4. Emergency telephone number
Emergency number: CHEMTREC 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS-US classification

2.2. GHS Label elements, including precautionary statements
GHS-US labeling

2.3. Other hazards which do not result in classification
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Substance type: Mono-constituent

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol (Main constituent)</td>
<td>(CAS-No.) 57-55-6</td>
<td>&gt;=99.0</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements: see section 16

3.2. Mixtures
Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures
First-aid measures general: May cause irritation of the eyes, skin and mucous membranes. Always observe self-protection methods. Move out of dangerous area. Remove contaminated shoes and clothing. Show this safety data sheet to the doctor in attendance.
First-aid measures after inhalation: If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.

First-aid measures after skin contact: Wash with water and soap as a precaution.

First-aid measures after eye contact: Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

First-aid measures after ingestion: Rinse mouth with water. Call Poison Control Center. Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.

4.2. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

Unsuitable extinguishing media: High volume water jet.

5.2. Specific hazards arising from the chemical

Fire hazard: No data is available on the product itself.

Reactivity: Reacts violently with (strong) oxidizers: (increased) risk of fire. Violent to explosive reaction with (strong) acids.

5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire: Exposure to fire/heat: keep upwind. Exposure to fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighborhood close doors and windows.

Firefighting instructions: Cool tanks/drumns with water spray/remove them into safety.

Protection during firefighting: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment: Gloves. Protective clothing.


6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment: Contain released product, pump into suitable containers. Plug the leak, cut off the supply.

Methods for cleaning up: Take up liquid spill into a non combustible material e.g.: sand, earth, vermiculite. Scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Handle empty containers with care – residue can burn if heated. Empty containers should be thoroughly rinsed with copious amounts of clean water. The rinse water can be used for makeup water for any necessary dilution of the concentrated product before use, or it can be properly discarded.

Hygiene measures: Observe normal hygiene standards. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool.

Heat-ignition: KEEP SUBSTANCE AWAY FROM: heat sources.
Information on mixed storage: KEEP SUBSTANCE AWAY FROM: oxidizing agents. reducing agents. (strong) acids. water/moisture.

Storage area: Store in a cool area. Store in a dry area. Store at ambient temperature. Keep out of direct sunlight. Ventilation at floor level. Provide the tank with earthing. Meet the legal requirements.

Special rules on packaging: SPECIAL REQUIREMENTS: closing. clean. dry. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.


SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Contains no substances with occupational exposure limits values.

8.2. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Materials for protective clothing:
GIVE EXCELLENT RESISTANCE: nitrile rubber.
GIVE GOOD RESISTANCE: butyl rubber. natural rubber. polyethylene. PVC. polyethylene/ethylenevinylalcohol. neoprene

Hand protection:
Gloves

Eye protection:
Safety glasses

Skin and body protection:
Protective clothing

Respiratory protection:
Full face mask with filter type A at conc. in air > exposure limit

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance: Liquid.
Color: Colorless; Clear
Odor: Almost odorless
Odor threshold: No data available
pH: 6.5 - 7.5 (50 %)
Melting point / Freezing point: -60 °C
Boiling point: >184 °C (1003 hPa)
Flash point: 104 °C (Closed cup, 1000 hPa)
Relative evaporation rate (butyl acetate=1): < 0.01
Flammability (solid, gas): Not applicable.
Vapor pressure: 20 hPa (25 °C)
Relative vapor density at 20 °C: 2.6
Relative density: 1.03 (20 °C)
Relative density of saturated gas/air mixture: 1
Specific gravity / density: 1038 kg/m³
Molecular mass: 76.1 g/mol
Solubility: Soluble in water.
Log Pow: -1.07 (Experimental value, EU Method A.8: Partition Coefficient, 20.5 °C)
**Auto-ignition temperature**: > 400 °C (1000 - 1001 hPa)

**Decomposition temperature**: No data available

**Viscosity, kinematic**: 42.1 mm²/s (25 °C)

**Viscosity, dynamic**: 43.43 mPa.s (25 °C)

**Explosion limits**:
- Temp: > 400 °C
- Pressure: 80 - 400 g/m³
- LEL: 2.6 vol %
- UEL: 12.6 vol %

**Explosive properties**: No data available

**Oxidizing properties**: No data available

**Other information**
- **Specific conductivity**: 4.4 µS/m
- **Saturation concentration**: 0.54 g/m³
- **VOC content**: 100 %
- **Other properties**: Gas/vapour heavier than air at 20°C. Clear. Hygroscopic. Slightly volatile.

**SECTION 10: Stability and reactivity**

**Reactivity**
No dangerous reaction known under conditions of normal use.

**Chemical stability**
Stable under normal conditions.

**Possibility of hazardous reactions**
No dangerous reactions known under normal conditions of use.

**Conditions to avoid**
None under recommended storage and handling conditions (see section 7).

**Incompatible materials**
No additional information available

**Hazardous decomposition products**
Carbon monoxide. Carbon dioxide (CO₂)

**SECTION 11: Toxicological information**

**Information on toxicological effects**
- **Acute toxicity**: Not classified

**LD₅₀**
- Oral rat: > 22000 mg/kg body weight (Rat, Experimental value)
- Dermal rabbit: > 2000 mg/kg body weight (24 h, Rabbit, Experimental value)

**ATE US**
- Oral: 20000 mg/kg body weight
- Dermal: 20800 mg/kg body weight

**Skin corrosion/irritation**: Not classified
- pH: 6.5 - 7.5 (50 %)

**Serious eye damage/irritation**: Not classified
- pH: 6.5 - 7.5 (50 %)

**Respiratory or skin sensitization**: Not classified

**Germ cell mutagenicity**: Not classified

**Carcinogenicity**: Not classified

**Reproductive toxicity**: Not classified

**Specific target organ toxicity – single exposure**: Not classified

**Specific target organ toxicity – repeated exposure**: Not classified

**Aspiration hazard**: Not classified

**Potential Adverse human health effects and symptoms**: Non-toxic if swallowed (LD₅₀ oral, rat > 5000 mg/kg). Practically non-toxic in contact with skin (LD₅₀ skin > 2000 mg/kg). Not irritant to skin. Not irritant to eyes.
Symptoms/effects after skin contact: ON CONTINUOUS EXPOSURE/CONTACT: Red skin. Not irritating.
Symptoms/effects after eye contact: Redness of the eye tissue.
Chronic symptoms: Change in the haemogramme/blood composition. Decreased renal function.

**SECTION 12: Ecological information**

12.1. Toxicity


<table>
<thead>
<tr>
<th>Propylene Glycol Industrial (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
</tr>
<tr>
<td>LC50 fish 2</td>
</tr>
<tr>
<td>ErC50 (algae)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Propylene Glycol Industrial (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
</tr>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
</tr>
<tr>
<td>Chemical oxygen demand (COD)</td>
</tr>
<tr>
<td>ThOD</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Propylene Glycol Industrial (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF other aquatic organisms 1</td>
</tr>
<tr>
<td>Log Pow</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Propylene Glycol Industrial (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface tension</td>
</tr>
<tr>
<td>Log Koc</td>
</tr>
<tr>
<td>Ecology - soil</td>
</tr>
</tbody>
</table>

12.5. Other adverse effects

No additional information available

**SECTION 13: Disposal considerations**

13.1. Disposal methods

Waste treatment methods: Empty containers should be taken to an approved waste handling site for recycling or disposal.
Product/Packaging disposal recommendations: Do not discharge into drains or the environment. Remove waste in accordance with local and/or national regulations. Recycle by distillation. Remove to an authorized waste incinerator for solvents with energy recovery. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.
SECTION 14: Transport information

Department of Transportation (DOT)
Not regulated as dangerous goods

Transportation of Dangerous Goods

Transport by sea

Air transport

SECTION 15: Regulatory information

15.1. US Federal regulations

**Propylene Glycol Industrial (57-55-6)**
Listed on the United States TSCA (Toxic Substances Control Act) inventory

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

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

15.2. International regulations

**CANADA**
No additional information available

**EU-Regulations**
No additional information available

**National regulations**
No additional information available

15.3. US State regulations

**Propylene Glycol Industrial (57-55-6)**

<table>
<thead>
<tr>
<th>State or local regulations</th>
<th>U.S. - New Jersey - Right to Know Hazardous Substance List</th>
</tr>
</thead>
</table>

SECTION 16: Other information

Revision date : 05/07/2018

NFPA health hazard : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.

Hazard Rating
Health : 0 Minimal Hazard - No significant risk to health

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class III B)

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS US (GHS HazCom 2012)
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