



Material Safety Data Sheet

Propylene Glycol Antifreeze & Engine Coolant

Section 1. Product and company identification

Product name

Propylene Glycol Antifreeze & Engine Coolant

Material uses

Anti-Freeze and Engine Coolant.

Supplier/Manufacturer

AMSOIL INC
925 Tower Avenue
Superior, WI 54880

Code

ANT

MSDS authored by

AMSOIL INC

In case of emergency

CHEMTREC, U.S. : 1-800-424-9300
International: +1-703-527-3887

Section 2. Hazards identification

Emergency overview

- Color** : Yellow.
- Physical state** : Liquid. [Fluid.]
- Odor** : Mild to Odorless.
- Signal word** : CAUTION!
- Hazard statements** : MAY CAUSE EYE AND SKIN IRRITATION.
- Precautions** : Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.
- OSHA/HCS status** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin** : Slightly irritating to the skin.
- Eyes** : Slightly irritating to the eyes.

Potential chronic health effects

- Chronic effects** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Inhalation** : No specific data.
- Ingestion** : No specific data.
- Skin** : Adverse symptoms may include the following:
irritation
redness

Eyes : Adverse symptoms may include the following:
irritation
watering
redness

Medical conditions aggravated by over-exposure : None known.

See toxicological information (Section 11)

Section 3. Composition/information on ingredients

United States

| Name | CAS number | % |
|-----------------|------------|----------|
| 1,2-Propanediol | 57-55-6 | 60 - 100 |

Canada

| Name | CAS number | % |
|-----------------|------------|----------|
| 1,2-Propanediol | 57-55-6 | 60 - 100 |

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

Section 4. First aid measures

Eye contact : Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms occur.

Skin contact : After contact with skin, wash immediately with plenty of soap and water. Get medical attention if symptoms occur.

Inhalation : Move exposed person to fresh air.

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5. Fire-fighting measures

Flammability of the product : No specific fire or explosion hazard.

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Hazardous decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions** : Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

- Small spill** : Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Avoid contact with used product. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Avoid contact with eyes, skin and clothing. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

United States

| Ingredient | Exposure limits |
|-----------------|--|
| 1,2-Propanediol | AIHA WEEL (United States, 5/2010). TWA: 10 mg/m ³ 8 hour(s). |

Canada

| Occupational exposure limits | | TWA (8 hours) | | | STEL (15 mins) | | | Ceiling | | | |
|------------------------------|----------------|---------------|-------------------|-------|----------------|-------------------|-------|---------|-------------------|-------|-----------|
| Ingredient | List name | ppm | mg/m ³ | Other | ppm | mg/m ³ | Other | ppm | mg/m ³ | Other | Notations |
| 1,2-Propanediol | ON 7/2010 | - | 10 | - | - | - | - | - | - | - | [a] |
| | | 50 | 155 | - | - | - | - | - | - | - | [b] |
| | US AIHA 5/2010 | - | 10 | - | - | - | - | - | - | - | |

Form: [a]Aerosol only. [b]Vapour and aerosol.

Consult local authorities for acceptable exposure limits.

| | |
|--|---|
| Recommended monitoring procedures | : Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. |
| Engineering measures | : No special ventilation requirements. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. |
| Hygiene measures | : Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. |
| Respiratory | : Not required under normal conditions of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Ensure an MSHA/NIOSH-approved respirator or equivalent is used. |
| Hands | : Use gloves appropriate for work or task being performed. Recommended: Natural rubber (latex). |
| Eyes | : Safety eyewear should be used when there is a likelihood of exposure. Recommended: Safety glasses with side shields. |
| Skin | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. No special protective clothing is required. Recommended: Coveralls. |
| Environmental exposure controls | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. |

Section 9. Physical and chemical properties

| | | | |
|-------------------------|---|----------------------------------|--|
| Physical state | : Liquid. [Fluid.] | Odor | : Mild to Odorless. |
| Color | : Yellow. | pH | : Not available. |
| Flash point | : Closed cup: 99.44°C (211°F) [Pensky-Martens.] | Auto-ignition temperature | : Not available. |
| Flammable limits | : Not available. | Melting point/ Pour point | : -76°C (-104.8°F) |
| Boiling point | : >176.67°C (>350°F) | Vapor pressure | : <0.013 kPa (<0.1 mm Hg) [20°C] |
| Relative density | : 1.02 to 1.03 | Vapor density | : 2.6 [Air = 1] |
| Volatility | : Not available. | Evaporation rate | : Not available. |
| Viscosity | : Not available. | Solubility | : Easily soluble in the following materials: cold water and hot water. |

Section 10. Stability and reactivity

| | |
|---|--|
| Chemical stability | : The product is stable. |
| Conditions to avoid | : No specific data. |
| Materials to avoid | : Reactive or incompatible with the following materials: oxidizing materials and acids. |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Hazardous polymerization | : Under normal conditions of storage and use, hazardous polymerization will not occur. |

Section 11. Toxicological information

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|--------------------------|---------------|--------------------------|----------|
| 1,2-Propanediol | LD50 Dermal LD50 Oral | Rabbit Rat | 20800 mg/kg 20.8 g/kg | - - |

Chronic toxicity : No specific data.

Section 12. Ecological information

Environmental effects : Not established

Aquatic ecotoxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|--------------------------------------|---|----------|
| 1,2-Propanediol | Acute LC50 >1000 mg/L Marine water | Crustaceans - Chaetogammarus marinus - Young - 5 mm | 48 hours |
| | Acute LC50 1020000 ug/L Fresh water | Daphnia - Ceriodaphnia dubia - <=24 hours | 48 hours |
| | Acute LC50 710000 ug/L Fresh water | Fish - Pimephales promelas - <=7 days | 96 hours |
| | Chronic NOEC 660000 ug/L Fresh water | Daphnia - Ceriodaphnia dubia - <=24 hours | 48 hours |
| | Chronic NOEC 600000 ug/L Fresh water | Fish - Pimephales promelas - <=7 days | 96 hours |

Section 13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Empty containers or liners may retain some product residues. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

DOT/TDG/IMDG/IATA : Not regulated.

Section 15. Regulatory information

United States

HCS Classification : Not regulated.

U.S. Federal regulations : United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: 1,2-Propanediol
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: 1,2-Propanediol: Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Air Act (CAA) 112 accidental release prevention: No products were found.

State regulations

Massachusetts : None of the components are listed.
New York : None of the components are listed.
New Jersey : The following components are listed: 1,2-Propanediol
Pennsylvania : The following components are listed: 1,2-Propanediol

California Prop. 65

No products were found.

Canada

WHMIS (Canada) : Not controlled under WHMIS (Canada).
Canadian lists : **CEPA Toxic substances:** None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: None of the components are listed.
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.

Canada inventory : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

International regulations

International lists : **Australia inventory (AICS):** All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: All components are listed or exempted.
Korea inventory: All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.

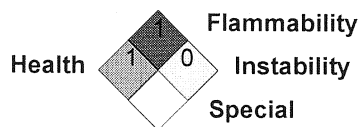
Section 16. Other information**United States**

Label requirements : MAY CAUSE EYE AND SKIN IRRITATION.

Hazardous Material Information System (U.S.A.) :

| | | |
|------------------|---|--|
| Health | 1 | Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868. |
| Flammability | 1 | |
| Physical hazards | 0 | |
| | | |

National Fire Protection :
Association (U.S.A.)



Date of issue : 08/15/2011
Date of previous issue : 08/15/2010
Version : 2

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.