

Revision Date 14-Nov-2014

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier : PAH | NOL® Universal Antifreeze
Code : 753
Chemical Name and Synonyms : Antifreeze/Inhibited Ethylene Glycol
Chemical Family : Ethylene Glycol Mixture
Recommended Use : Antifreeze Fluid
Restrictions on Use : Dilution to 50% is generally recommended: dilute to meet local condition.

Details of the supplier of the safety data sheet

Manufacturer Address : U.S. Lubricants, A Division of U.S. Venture, Inc.
 425 Better Way
 Appleton, WI 54915

Emergency telephone number

Company Phone Number 800-490-4900
24 Hour Emergency Phone Number 800-688-4005 DTCG84-01-A-900043

2. HAZARDS IDENTIFICATION

Hazard Classification : OSHA: Target organ effect, harmful by ingestion, teratogen; TARGETED ORGANS: Liver, cardiovascular system, eyes, kidney, central nervous system. GHS: Acute toxicity Oral - Category 4, Eye Irritation - Category 2B

Signal Word : Warning

Hazard Statement : Material is considered a "Hazardous Chemical" as defined by OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of this product.

Pictogram Description : GHS: Exclamation Point.

Precautionary Statement : Keep container tightly closed. Keep away from heat, sparks or open flames. No smoking, drinking or eating around product. Wear protective gloves, eye and face equipment. Store in a cool, dry and well-ventilated location. Avoid release to the environment.

Any other Hazard not otherwise classified : Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Common name and synonyms	CAS #	% by weight
Ethylene Glycol	Monoethylene Glycol	107-21-1	95%
Water	N/A	7732-18-5	2.5%
Inhibitors and Dye	N/A	Proprietary	2.5%

4. FIRST AID MEASURES

Symptoms of Exposure

- Acute** : Irritation of affected area with symptoms of reddening, itching, swelling, burning, possible permanent damage, nausea, vomiting, weakness, and death
- Delayed** : Irritation of affected area with symptoms of reddening, itching, swelling, burning, possible permanent damage, nausea, vomiting, weakness, abdominal pain, muscle tenderness, respiratory failure, severe metabolic acidosis, hypocalcemia and death
- Inhalation** : Vapors and mists cause respiratory irritation and may be harmful if inhaled.
- Skin contact** : Irritation may result. May be harmful if absorbed through skin.
- Eye contact** : Irritation may cause transitory stinging and tearing.
- Ingestion** : Toxic: may be harmful or fatal if swallowed.

First Aid Instructions

- Inhalation** : Remove to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Seek medical attention.
- Skin** : Wash skin with soap and water for at least 20 minutes. Remove any contaminated clothing. Seek medical attention immediately if symptoms or irritation develops.
- Eye contact** : Flush with water for at least 20 minutes. Seek medical attention if irritation develops or persists.
- Ingestion** : DO NOT induce vomiting, seek medical attention immediately. If swallowed give 2 to 3 glasses of water if victim is conscious and alert. Do not give anything by mouth to an unconscious person. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to victim to further dilute the chemical.
- Other** : Consult a physician. Show safety data sheet to the doctor in attendance.

5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable extinguishing media** : Water, water fog, water spray, alcohol foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media** : No data available.
- Hazards from combustion** : Smoke may contain the original material in addition to but not limited to: Carbon Monoxide, Carbon Dioxide.
- Special Protective Equipment for Firefighters** : Wear self-contained breathing apparatus and protective suit. Evacuate personnel to safe areas and keep upwind of fire.

6. ACCIDENTAL RELEASE MEASURES

Use of personal precautions	: Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment.
Protective equipment to prevent the contamination of skin, eyes, and clothing.	: Usage of safety glasses or goggles is recommended. Chemical resistant gloves, chemical resistant apron, boots, and full suit will be necessary depending on the extent of clean up task. If ventilation does not control airborne concentration then respiratory protection equipment that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements should be used.
Methods and materials used for containment	: Collect liquid in an appropriate container or absorb with inert material and place in chemical waste container.
Cleanup procedures	: Do not flush to sewer. Comply with all federal, state, and local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling	: Protect container from physical damage. Wear appropriate personal protection equipment. Do not expose containers to open flame, excessive heat, or direct sunlight. Use local exhaust over processing area. Do not eat, drink or smoke around products.
Recommendations on the conditions for safe storage, Storage/handling incompatibilities.	: Store in a cool, dry and ventilated area away from sources of heat, moisture and incompatible materials. Observe all warnings and precautions listed for the product. Keep container closed to prevent contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Permissible Exposure Limits (PELs)	: Not Applicable
American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values	: ACGIH TLV: 100 mg/m ³
Other Exposure Limits	: OSHA - Table Z-1 Limits for air contaminants - 1910.1000: 50 ppm 125 mg/m ³
Engineering Control	: Use mechanical (general) ventilation to control airborne levels below exposure guidelines.
Individual Protection Measures	: Wear protective safety glasses or goggles, gloves, apron, vapor respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	: Liquid.
Color	: Fluorescent Green (Clear)
Upper/lower flammability or explosive limits	: Not Explosive; LOWER: 3.2% (v) UPPER: 15.3% (v)
Odor	: Slight to no odor
Vapor pressure	: 134 Pa / 0.1 mmHg
Odor threshold	: No data available.
Vapor density (air = 1)	: 2.14
pH	: 7.5 – 11.0
Relative density	: 1.120 - 1.140

Freezing point (as 50%) : -34°F / -37°C
 Solubility(ies) : Miscible in water
 Initial boiling point and boiling range : 385°F / 196°C
 Flash point : 232°F / 111°C
 Evaporation rate (Butyl Acetate = 1) : <1
 Flammability (solid, gas) : This material is Not Flammable but can burn if heated
 Partition coefficient: n-octanol/water : Log Pow: -1.36
 Auto-ignition temperature : > 700°F / > 370°C
 Decomposition temperature; Partition coefficient: n-octanol/ water : Not applicable
 Partition coefficient: n-octanol/ water : Not available.
 Auto-ignition temperature : Not available.
 Decomposition temperature : Not available.
 Viscosity : ~16 cps at 60°F

10. STABILITY AND REACTIVITY

Reactivity : Product is stable under typical use temperatures.
 Chemical stability : Product is stable under typical use temperatures.
 Hazardous reactions : Avoid contact with oxidizing materials strong bases and strong acids.
 Conditions to avoid : Heat, flames, ignition sources and incompatibles.
 Incompatible materials : Avoid contact with oxidizing agents, strong bases and strong acids.
 Decomposition products : Carbon dioxide and carbon monoxide may form when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Likely routes of exposure : Eyes/Skin/Ingestion/Inhalation

	Effects from Short Term Exposure	Effects from Long Term Exposure
Delayed Effects	Irritation of affected area	Irritation of affected area
Immediate Effects	Irritation of affected area	Irritation of affected area
Chronic Effects	Not applicable	Teratogenic effects
The numerical measures of toxicity (e.g., acute toxicity estimates such as the LD50 (median lethal dose)) - the estimated amount [of a substance] expected to kill 50% of test animals in a single dose.		Skin: LD50 - Rabbits - >10600 mg/kg Ingestion: LD50 - Rats - 7712 mg/kg Lethal Dose Human Adult - 90mL
Description of the symptoms. This description includes the symptoms associated with exposure to the chemical including symptoms from the lowest to the most severe exposure.		Irritation, nausea, vomiting, abdominal pain, weakness, muscle tenderness, respiratory failure, convulsions, cardiovascular collapse, pulmonary edema, hypocalcemia, tetany, metabolic acidosis, death.

Listed in the National Toxicology Program (NTP) Report on Carcinogens	No	Found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs	No	Found to be a potential carcinogen by OSHA	No
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12. ECOLOGICAL INFORMATION

- Ecotoxicity** : Low Ecotoxicity
- Persistence and Degradability** : Biodegradable
- Bioaccumulation** : Does not bioaccumulate significantly
- Mobility in soil** : Dissolves in water. If product enters soil, it will be highly mobile and may contaminate ground water
- Other adverse effects** : No data available

13. DISPOSAL CONSIDERATIONS

Do not dump into sewers, on ground or into any bodies of water. Contact local sewer, municipal, state and/or federal agencies to determine appropriate disposal options

14. TRANSPORT INFORMATION

- Is product DOT regulated in Non-Bulk packaging?** : No
- DOT BULK**
- UN number** : UN3082
- UN proper shipping name** : Environmentally hazardous substances, liquid, n.o.s.
- Transport hazard class(es)** : 9
- Packaging group number** : III
- Environmental hazards (e.g., identify if it is a marine pollutant according to the International Maritime Dangerous Goods Code (IMDG Code))** : Not regulated
- Guidance on transport in bulk (according to Annex II of MARPOL 73/783 and the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk)** : Not regulated

(International Bulk Chemical Code (IBC Code))

Any special precautions which an employee should be aware of or needs to comply with, in connection with transport or conveyance either within or outside their premises : Reportable Quantity (RQ): 5000 lbs Ethylene Glycol

15. REGULATORY INFORMATION

Safety Regulations : OSHA Hazard Communication Standard: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Health regulations : Not available

Environmental regulations : Not available

SARA 311/312	Based upon available information, this material is classified as the following health and/or physical hazards according to Section 311 & 312	Superfund Amendments and Reauthorization Act of 1986 Title III (SARA) Sections 311 and 312: Immediate (Acute) Health Hazard - Yes; Delayed (Chronic) Health Hazard - Yes; Fire Hazard - No; Reactive Hazard - No; Sudden Release of Pressure Hazard - No. Section 313: Product contains the following substances which are subject to reporting requirements and are listed in 40 CFR 372 - Component: Ethylene Glycol CAS#: 107-21-1 Amount: >=99.0%.
HMIS	Blue/Health	2
	Red/Flammability	1
	Orange/Physical Hazard	0
	White/Personal Protection	x
NFPA 0 (no hazard) to 4(severe risk)	Health (Blue)	2
	Flammability (Red)	1
	Special (White)	0
	Instability/Reactivity (Yellow)	N/A
US Toxic Substance Control Act	All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30	
CEPA – Domestic Substances List (DSL)	All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.	

16. OTHER INFORMATION

This SDS is applicable for all dilutions and containers for this brand of product. The information herein is provided in good faith and believed to be accurate as of the effective revision date shown. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/ user's responsibility to ensure that activities comply with all federal, state, provincial or local law.

Properties	60%	50%	40%	35%	30%	25%
SECURITY® Extended Life Nitrite Free A Antifreeze		48%				
Performance Additives and Water		52%				
Specific Gravity (15/150C 60/60F)		1.060 – 1.090				
Reserve Alkalinity (min)		3				
Freeze Point Max		-34°F / -37°C				

History

Date of issue mm/dd/yyyy : 11/14/2014
 Prepared by : US Lubricants

End of Safety Data Sheet