

**SECTION 1- PRODUCT AND MANUFACTURER INFORMATION**

MSDS DATE: 02/11/2003

PRODUCT	<b>NPG+</b>
SYNONYMS	Coolant
CHEMICAL FAMILY	Glycols
FORMULA	Blend

MANUFACTURER

Evans Cooling Systems, Inc  
255 Route 41 North  
Sharon, CT 06069  
860-364-5130

EMERGENCY INFORMATION

EMERGENCY PHONE 888-990-2665 (24-hour)

**SECTION 2 - HAZARDOUS INGREDIENTS**

<u>CHEMICAL/COMMON NAME</u>	<u>CAS-NUMBER</u>	<u>%</u>	<u>PEL-OSHA</u>	<u>ACGIH - STEL</u>
ETHYLENE GLYCOL	107-21-1	≥ 69%	none established	50 ppm (ceiling)

Product is not considered carcinogenic by NTP, IARC or OSHA

**SECTION 3 - HAZARDOUS MATERIAL IDENTIFICATION SYSTEM**

HEALTH=2 FLAMMABILITY=0 REACTIVITY=0 PROTECTION=B

**SECTION 4 - HEALTH HAZARD DATA**HEALTH EFFECTS (*Acute And Chronic*)EYES May cause slight transient eye irritation; corneal injury is unlikely.SKIN Generally non-irritating. Prolonged or repeated contact may cause flaking, tenderness and softening of the skin.INHALATION No adverse effects under normal usage. However, if significant vapors or mists are inhaled, exposure may result in irritation to the upper respiratory system.INGESTION Ethylene Glycol is considered toxic and may cause central nervous system depression, dizziness, headache and nausea. Significant ingestion may lead to loss of consciousness. Has been known to cause kidney toxicity.PRIMARY ROUTES OF ENTRY

EYES/SKIN: Yes

INHALATION: No

INGESTION: Not Likely

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE pre-existing eye disease

**SECTION 5 - FIRST AID INSTRUCTIONS**

EYES Flood with water for at least 15 minutes. If irritation persists, get medical attention.

SKIN Wash with water and mild soap. If irritation occurs and persists, get medical attention.

INHALATION Inhalation exposure should require no action. However, if significant inhalation exposure has occurred, move victim to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, administer artificial respiration (mouth to mouth is preferred) if trained - get immediate medical attention.

INGESTION If victim is alert, give the victim 4 – 8 oz of water. Do NOT induce vomiting. Keep victim calm warm and seek medical advice

NOTE: Liver damage may be indicated by loss of appetite, jaundice, fatigue and sometimes pain/swelling on right upper abdomen. Kidney toxicity is indicated by blood in urine or increased/decreased urine flow. Other signs and symptoms of exposure can include nausea, abdominal cramps and diarrhea.

**SECTION 6 - CHEMICAL DATA**

BOILING POINT	375°F	SPECIFIC GRAVITY (WATER=1)	1.09
VAPOR PRESSURE (kPa)	8.0@176°F	SPECIFIC HEAT @212°F	0.66BTU/lb
VAPOR DENSITY (AIR=1)	>1.0	AUTOIGNITION TEMPERATURE	1054.7°f

SOLUBILITY IN WATER complete

APPEARANCE AND ODOR INFORMATION Brown liquid, faint sweet trace odor

INCOMPATIBILITY (Materials To Avoid) oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS none

WILL HAZARDOUS POLYMERIZATION OCCUR no

CONDITIONS TO AVOID FOR POLYMERIZATION none

IS THE PRODUCT STABLE yes

CONDITIONS TO AVOID FOR STABILITY none

**SECTION 7 – FIRE FIGHTING INFORMATION**

FLASH POINT (Method Used) 233.4°F FLAMMABLE LIMITS lower = 2.6% upper = 12.6%

EXTINGUISHING MEDIA water fog, foam, dry chemical

SPECIAL FIRE FIGHTING PROCEDURES Keep fire-exposed containers cool with water fog. Wear SCBA and full turnout gear as recommended by NFPA.

UNUSUAL FIRE AND EXPLOSION HAZARDS None expected under normal storage and handling conditions. Avoid exposing product to ignition sources (sparks) or temperatures above flash or autoignition point.

**SECTION 8 - SPILL OR LEAK/DISPOSAL PROCEDURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Dike and contain the spill. Spread granular absorbent Sweep up and place in container for disposal. Do not allow material to enter drains, sewers and waterways. Comply with spill all local notification requirements. All response activities must comply with HAZWOPER (29CFR 1910.120).

WASTE DISPOSAL METHODS Dispose of waste in compliance with local, state and federal regulations. Recycle all wastes whenever feasible.

**SECTION 9 – TOXICOLOGY INFORMATION**

For ETHYLENE GLYCOL: Repeated oral exposure in experimental animals and in humans has caused kidney toxicity secondary to metabolic acidosis. Humans are more sensitive to ethylene glycol than experimental animals. Toxic doses are estimated to be 3 – 4 oz (approx. one-half cup) for an average human adult.

**SECTION 10 – ECOLOGICAL INFORMATION**

Data being evaluated.

**SECTION 11 - EXPOSURE CONTROL AND PROTECTION**

VENTILATION Use forced-air ventilation when handling product in a confined area

RESPIRATORY PROTECTION Not normally needed during intended usage and handling. However, if exposure causes irritation during routine or non-routine application of product, use NIOSH/MSHA approved respiratory protection (refer to 29CFR 1910.134).

PROTECTIVE GLOVES Rubber or PVC (refer to 29CFR 1910.132)

OTHER PROTECTIVE EQUIPMENT Wear eye protection and full cover shirt and pants to protect against exposure. Provide local emergency showers and eyewash stations in the workplace

OTHER ENGINEERING CONTROLS Use local exhaust to minimize mist or vapor levels in the work area.

WORK PRACTICES All users should consult MSDS before handling this material.

HYGIENIC PRACTICES Wash hands and face after using this product. Remove contaminated clothing Launder contaminated clothing before re-use.

**SECTION 12 – HANDLING AND STORAGE**

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE Store in a cool, dry place. Keep all containers closed when not in use.

**SECTION 13 - SPECIAL PRECAUTIONS**

MAINTENANCE PRECAUTIONS None

**SECTION 14 – OTHER INFORMATION**

NOTE: This MSDS is intended to protect personnel during packaging, storage and transport of the product in bulk quantities. It is recognized that the end-user will most likely handle (and subsequently be exposed to) less than 10 gallons of the product.

**SECTION 15 – REGULATORY INFORMATION**

COMPONENT INFORMATION: ( U.S.A. and Foreign Patents Pending )

00107-21-1 Ethylene Glycol (66 – 70%) \*\*  
00057-55-6 Propylene Glycol  
7732-15-5 Water  
----- Proprietary Corrosion Inhibitor Package <2%

SARA INFORMATION \*\*Ethylene Glycol is regulated under SARA III Section 313 Supplier Notification Requirements.

TSCA INFORMATION All components of this product are listed in the TSCA Inventory.

DOT INFORMATION

Not Regulated

**SECTION 16 – HAZARDOUS MATERIAL IDENTIFICATION GUIDE**

The follow letter codes refer to personal protective equipment (PPE) recommendations as shown in SECTION 3 of this MSDS, relative to handling hazardous chemical products.

- A Safety Glasses
  - B** ***Safety Glasses, Hand Protection***
  - C Safety Glasses, Hand Protection, Protective Apron
  - D Full Face Shield, Hand Protection, Protective Apron
  - E Safety Glasses, Hand Protection, Dust Respirator
  - F Safety Glasses, Hand Protection, Dust Respirator, Protective Apron
  - G Safety Glasses, Hand Protection, Vapor Respirator
  - H Splash Goggles, Hand Protection, Protective Apron, Vapor Respirator
  - I Safety Glasses, Hand Protection, Dust & Vapor Respirator
  - J Safety Glasses, Hand Protection, Protective Apron, Dust & Vapor Respirator
  - K Air Line Hood or Mask, Hand Protection, Full Body Suit, protective Boots
  - X Unspecified – to be determined\*
- (\*special equipment selection for site-specific applications not otherwise shown here)