

Nitrite Free Extended Life Pre-diluted Heavy Duty Coolant

SECTION 1: IDENTIFICATION

| Product name | Nitrite Free Extended Life Pre-diluted Heavy Duty Coolant |
|---------------------------------|--|
| Description | Nitrite, Amine, Phosphate and Silicate Free Pre-mixed Coolant |
| Supplier's details | |
| Name Address | Toxguard Fluid Technologies, Inc. 11942 Western Ave. Stanton, CA 90680 |
| Telephone Fax | (714) 698-3400 (714) 698-3404 |
| Emergency phone number(s) | |
| Professional Emergency Resource | Services |

Domestic Shipments: 800-633-8253 International Shipments: 8014-629-0667

SECTION 2: Hazard identification

GHS classification in accordance with OSHA (29 CFR 1910.1200)

Specific target organ toxicant (repeated exposure): Category 2 Acute oral toxicant: Category 4

GHS label elements, including precautionary statements

Pictogram



Signal word

Warning

Hazard Statements:

Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. Central Nervous system, Kidney

Precautionary Statements:

Prevention: Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Response: IF SWALLOWED: Rinse mouth. Call a poison center or doctor/physician if you feel unwell. Get medical advice/attention if you feel unwell.

Disposal: Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

PHYSICAL / CHEMICAL HAZARDS

No significant hazards.

HEALTH HAZARDS

High-pressure injection under skin may cause serious damage. Ingestion may cause serious adverse effects and may be fatal. May cause kidney failure and central nervous system effects. Prolonged exposure to elevated concentrations of mist or liquid may cause irritation of the skin, eyes, and respiratory tract. Excessive exposure may result in eye, skin, or respiratory irritation.

ENVIRONMENTAL HAZARDS

No significant hazards.

| NFPA Hazard ID: | Health: | 1 | Flammability: | 0 | Reactivity: 0 |
|-----------------|---------|----|---------------|---|---------------|
| HMIS Hazard ID: | Health: | 1* | Flammability: | 0 | Reactivity: 0 |

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

| 1. Ethylene Glycol | |
|--------------------|----------|
| Concentration | ~50 % |
| CAS no. | 107-21-1 |

2. Proprietary Additives and Inhibitors

| Concentration | <5 % |
|---------------|----------------|
| CAS no. | Not Applicable |

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

SECTION 4: First-aid measures

INHALATION

Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device.

SKIN CONTACT

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

Seek immediate medical attention.

NOTE TO PHYSICIAN

This product contains ethylene glycol and/or diethylene glycol which, if ingested, are metabolized to toxic metabolites by the enzyme alcohol dehydrogenase, for which ethanol and 4-methylpyrazole {U.S. drug name Fomepizole, trade name Antizol} are antagonists. Administration of oral or intravenous ethanol or intravenous 4-methylpyrazole may arrest further metabolism of this material and thereby ameliorate the toxicity. Use of ethanol or 4-methylpyrazole does not affect toxic metabolites that are already present and is not a substitute for hemodialysis.

SECTION 5: Fire-fighting measures

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, alcohol-resistant foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water or Regular Foam

FIRE FIGHTING

Fire Fighting Instructions: Material will not burn. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

Unusual Fire Hazards: Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

Hazardous Combustion Products: Aldehydes, Smoke, Fume, Oxides of carbon

FLAMMABILITY PROPERTIES Flash Point [Method]: N/A

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D Autoignition Temperature: N/D

SECTION 6: Accidental release measures

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

SPILL MANAGEMENT

Land Spill: Stop leak if you can do it without risk. Do not touch or walk through spilled material. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do it without risk. Consult an expert. Warn other shipping. Material will sink. Remove material, as much as possible, using mechanical equipment.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Remove debris in path of spill and remove contaminated debris from shoreline and water surface and dispose of according to local regulations. Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7: Handling and storage

Precautions for safe handling

Minimum feasible handling temperatures should be maintained. Empty containers contain product residue and may be dangerous.

Conditions for safe storage, including any incompatibilities

Periods of exposure to high temperature should be minimized. Water contamination should be avoided. Keep containers away from open flames. ETHYLENE GLYCOL BASE – Ethylene Glycol has produced birth defects in rodents. Do not store near food.

SECTION 8: Exposure controls/personal protection

Control parameters

Ethylene glycol (vapor) TWA 100 mg/m3 (ceiling) ACGIH

Appropriate engineering controls

No special requirements under ordinary conditions of use and with adequate ventilation. Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Skin protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Nitrile rubber, PVC or Neoprene gloves are suitable protective materials.

Body protection

Where splashing is possible, full chemically resistant protective clothing, rubber apron and boots are required.

Respiratory protection

Supplied air respiratory protection for cleaning large spills or upon entry into tanks, vessels, or other confined spaces. Use a NIOSH approved organic vapor and gas respirator with mist filter

Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

SECTION 10: Stability and reactivity

Chemical stability

Stable under recommended handling and storage conditions.

Possibility of hazardous reactions

No data available.

Conditions to avoid

High temperatures above 413°C (775°F) (product can decompose)

Incompatible materials

Avoid contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates, which can generate heat, fires, explosions and the release of toxic fumes.

Hazardous decomposition products

In the event of combustion CO, CO2 may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment.

SECTION 11: Toxicological information

Information on toxicological effects

Toxicity for substances

| Hazard Class | Conclusion / Remarks |
|--|---|
| Inhalation | |
| Acute Toxicity: No end point data for material. | Minimally Toxic. Based on assessment of the components. |
| Irritation: No end point data for material. | Negligible hazard at ambient/normal handling temperatures. |
| Ingestion | |
| Acute Toxicity (Human): LDLo 100 ml | Moderately toxic. Based on assessment of the components. |
| Skin | |
| Acute Toxicity: No end point data for material. | Minimally Toxic. Based on assessment of the components. |
| Skin Corrosion/Irritation: No end point data for material. | Negligible irritation to skin at ambient temperatures. Based on assessment of the components. |
| Еуе | |
| Serious Eye Damage/Irritation: No end point data for material. | May cause mild, short-lasting discomfort to eyes. Based on assessment of the components. |
| Sensitization | |
| Respiratory Sensitization: No end point data for material. | Not expected to be a respiratory sensitizer. |
| Skin Sensitization: No end point data for material. | Not expected to be a skin sensitizer. Based on assessment of the components. |
| Aspiration: Data available. | Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. |
| Germ Cell Mutagenicity: No end point data for material. | Not expected to be a germ cell mutagen. Based on assessment of the components. |
| Carcinogenicity: No end point data for material. | Not expected to cause cancer. Based on assessment of the components. |
| Reproductive Toxicity: No end point data for material. | Not expected to be a reproductive toxicant. Based on assessment of the components. |
| Lactation: No end point data for material. | Not expected to cause harm to breast-fed children. |
| Specific Target Organ Toxicity (STOT) | |
| Single Exposure: No end point data for material. | Not expected to cause organ damage from a single exposure. |
| Repeated Exposure: No end point data for material. | Concentrated, prolonged or deliberate exposure may cause organ damage. Based on assessment of the components. |

| NAME | ACUTE TOXICITY |
|-----------------|---------------------------------------|
| ETHYLENE GLYCOL | Oral Lethality: LD50 4700 mg/kg (Rat) |

OTHER INFORMATION

For the product itself:

Target Organs Repeated Exposure: Central Nervous system, Kidney

Contains:

ETHYLENE GLYCOL (EG): Repeated high oral exposure has caused kidney damage, neurological effects, degeneration of the liver and changes in blood chemistry and circulating blood cells in laboratory animals. Repeated overexposure has the potential to cause similar toxic effects in humans. EG causes developmental and reproductive effects at high dose levels in laboratory animals. The relevance of these findings to humans is uncertain.

The following ingredients are cited on the lists below: None.

| | REGULATORY LISTS SE | ARCHED |
|--------------|---------------------|---------------|
| 1 = NTP CARC | 3 = IARC 1 | 5 = IARC 2B |
| 2 = NTP SUS | 4 = IARC 2A | 6 = OSHA CARC |

SECTION 12: Ecological information

Toxicity

This material is not expected to be harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Persistence and degradability

This material is expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material. The product has not been tested. The statement has been derived from the properties of the individual components.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

No data available.

SECTION 13: Disposal considerations

Disposal of the product

Dispose of waste in accordance with Federal, State and Local laws. Under RCRA, it is the responsibility of the user of products to determine, at the time of disposal, whether product meets RCRA criteria for hazardous waste. This is because product uses transformations, mixture, processes, etc., may render the resulting material hazardous (see waste classification)

Disposal of contaminated packaging

Containers should be cleaned of residual product before disposal, and disposed of in accordance with all applicable laws and regulations.

SECTION 14: Transport information

DOT (US)

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Ethylene Glycol) Hazard Class & Division: 9 ID Number: 3082 Packing Group: III Product RQ: 10416.67 LBS - ETHYLENE GLYCOL ERG Number: 171 Label(s): 9 Transport Document Name: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Ethylene Glycol), 9, PG III, RQ

Footnote: This material is not regulated under 49 CFR when the quantity in a package is less than the Product RQ.

SECTION 15: Regulatory information

OSHA HAZARD COMMUNICATION STANDARD: This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

Listed or exempt from listing/notification on the following chemical inventories: AICS, DSL, ENCS, KECI, PICCS, TSCA

EPCRA SECTION 302: This material contains no extremely hazardous substances.

CERCLA:

| Chemical Name | CAS Number | Typical Value | Component RQ | Product RQ |
|-----------------|------------|---------------|--------------|------------|
| ETHYLENE GLYCOL | 107-21-1 | ~ 50% | 5000 LBS | 10,000 LBS |

SARA (311/312) REPORTABLE HAZARD CATEGORIES: Immediate Health. Delayed Health.

SARA (313) TOXIC RELEASE INVENTORY:

| Chemical Name | CAS Number | Typical Value |
|-----------------|------------|---------------|
| ETHYLENE GLYCOL | 107-21-1 | ~ 50% |

The following ingredients are cited on the lists below:

| Chemical Name | CAS Number | List Citations |
|-----------------|------------|-------------------|
| ETHYLENE GLYCOL | 107-21-1 | 1, 13, 16, 18, 19 |

| REGULATORY LISTS SEARCHED | | | | |
|---------------------------|------------------|-------------------|-------------|--|
| 1 = ACGIH ALL | 6 = TSCA 5a2 | 11 = CA P65 REPRO | 16 = MN RTK | |
| 2 = ACGIH A1 | 7 = TSCA 5e | 12 = CA RTK | 17 = NJ RTK | |
| 3 = ACGIH A2 | 8 = TSCA 6 | 13 = IL RTK | 18 = PA RTK | |
| 4 = OSHA Z | 9 = TSCA 12b | 14 = LA RTK | 19 = RI RTK | |
| 5 = TSCA 4 | 10 = CA P65 CARC | 15 = MI 293 | | |

Code key: CARC=Carcinogen; REPRO=Reproductive

SECTION 16: Other information

Further information/disclaimer

The information contained herein is provided in good faith and believed to be correct as of the date hereof. Toxguard makes no representation as to the comprehensiveness or accuracy of the information. This product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. For any other uses, exposures should be evaluated so that appropriate handling practices and training programs can be established to ensure safe workplace operations. Please consult your local sales representative for any further information.