Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Directives



1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED): SYNONYMS: CHEMICAL SHIPPING NAME/CLASS:

U.N. NUMBER: MANUFACTURER'S NAME: ADDRESS: **EMERGENCY PHONE: BUSINESS PHONE:** DATE OF PREPARATION: DATE OF LAST REVISION:

Nitrite Free Extended Life Pre-Diluted Heavy Duty Coolant N/A Environmental Hazardous Substances, Liguid, n.o.s (ethylene glycol) UN3082 Emerald Services, Inc. 6851 East Marginal Way S, Seattle WA 98108 USA (800) 424-9300 (CHEMTREC - #7619) (509) 928-6789 February 12, 2016 January 28, 2016

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

Product Description: This product is a yellow liquid with a mild odor.

Health Hazards: May be harmful if swallowed. May be a reproductive hazard.

Flammability Hazards: This product is a nonflammable liquid with a flash point of >200°F (93.3°C).

Reactivity Hazards: This product is not reactive.

Environmental Hazards: Release of the product may cause adverse effects to the aguatic environment. Emergency Recommendations: Emergency responders must have personal protective equipment and fire protection appropriate for the situation to which they are responding.

EU LABELING AND CLASSIFICATION: This product does meet the definition of a hazardous substance or preparation according to EU Regulations (EC) No 1272/2008.

INDEX NUMBER:

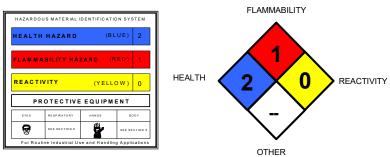
EC# 203-473-3 Annex VI Index#: 603-027-00-1 EC# 205-743-6 Annex VI Index#: 607-230-00-6

COMPONENT(S) DETERMINING HAZARD:

Ethylene glycol, Ethylhexanoic acid

GHS CLASSIFICATIONS:

Reproductive Toxicity Category 2 Acute Toxicity Category 4 (Oral)



Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

SIGNAL WORD: Warning!

PICTOGRAMS:



HAZARD STATEMENTS:

H302: Harmful if swallowed H361: Suspected of damaging fertility or the unborn child

PREVENTION STATEMENTS:

P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have P260: Do not breathe dust/fume/gas/mist/vapours/spray. Emerald Services Inc.

P270: Do not eat, drink or smoke when using this product.

RESPONSE STATEMENTS :

P308+P313: IF exposed or concerned: Get medical advice/attention. P330: Rinse mouth. P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

STORAGE STATEMENTS:

P405: Store locked up.

DISPOSAL STATEMENTS:

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

HEALTH EFFECTS OR RISKS FROM EXPOSURE:

ACUTE:

EYE: Contact may cause irritation.

SKIN: Contact may cause irritation.

INHALATION: Inhalation may cause irritation.

INGESTION: May be harmful if swallowed.

CHRONIC: Contains components that are classified as a reproductive hazard.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT%	CAS#	EINECS #	Hazard Classification(s)			
Ethylene glycol	40-60%	107-21-1	203-473-3	Acute Tox Cat 4 (Oral)			
Ethylhexanoic acid	<1%	149-57-5	205-743-6	Repr. Cat 2			
Balance of other ingredients is less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).							

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard *JIS Z 7250: 2000.*

4. FIRST-AID MEASURES

SKIN EXPOSURE: If this product contaminates the skin, begin decontamination with running water and soap. Remove exposed or contaminated clothing, taking care not to contaminate eyes. The contaminated individual should seek medical attention if irritation occurs or persists.

EYE EXPOSURE: If this product enters the eyes, open contaminated individual's eyes while under gently running water. Use sufficient force to open eyelids. Remove contact lenses if worn. Have contaminated individual "roll" eyes. <u>Minimum</u> flushing is for 15 minutes. Contaminated individual must seek medical attention if irritation develops or persists or if visual changes occur.

INHALATION: If vapors/mists generated by this product are inhaled, remove contaminated individual to fresh air. If necessary, use artificial respiration to support vital functions. SEEK IMMEDIATE MEDICAL ATTENTION.

INGESTION: If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. DO NOT induce vomiting; if vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Never induce vomiting or give diluents (milk or water) to someone who is <u>unconscious</u>, <u>having</u> <u>convulsions</u>, or <u>unable to swallow</u>. SEEK IMMEDIATE MEDICAL ATTENTION.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing skin, eye, and respiratory conditions may be more susceptible to effects of this material.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

5. FIRE-FIGHTING MEASURES

FLASH POINT: >200°F (93.3°C).

AUTOIGNITION TEMPERATURE: Not Established

FLAMMABLE LIMITS (in air by volume, %): Lower N.E% Upper N.E%

FIRE EXTINGUISHING MATERIALS: Use fire extinguishing methods listed below:

Water Spray: No	Carbon Dioxide: Yes
Foam: Yes	Dry Chemical: Yes
<u>Halon</u> : Yes	Other: Any "C" Class

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Explosion Sensitivity to Mechanical Impact: No Explosion Sensitivity to Static Discharge: No

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Maintain adequate ventilation. Follow personal protective equipment recommendations found in section 8. Eliminate all sources of ignition. Contain and recover liquid if possible. Use non-sparking tools and equipment. Cover or absorb spilled liquid with sand, earth or other inert material. Clean up spill immediately and place in appropriate containers. Do not discharge to sewers and surface waters.

Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

7. HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing.

STORAGE AND HANDLING PRACTICES: Store in a well-ventilated area and protect against physical damage. Avoid sources of ignition.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

Chemical Name	CAS#	ACGIH TLV	OSHA TWA
Ethylene glycol	107-21-1	100 mg/m ³	100 mg/m ³
Ethylhexanoic acid	149-57-5	5 mg/m³	5 mg/m ³

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use a chemical fume hood or local exhaust ventilation, and process enclosure if necessary, to control exposure. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Use chemical safety goggles and/or a full face shield is required where splashing is possible. Maintain eye wash fountain and guick-drench facilities in work area. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Use chemically-resistant gloves when handling this product. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

9. PHYSICAL and CHEMICAL PROPERTIES

VAPOR DENSITY: Not Applicable % VOLATILE: No Data Available SOLUBILITY IN WATER: Slight VAPOR PRESSURE: No Data Available **ODOR:** Mild **ODOR THRESHOLD:** No Data Available **UPPER/OWER FLAMMABILIY:** Not Available **DECOMPOSITION TEMPERATURE:** No Data Available **RELATIVE DENSITY:** No Data Available **PARTITION COEFFICIENT:** No Data Available

EVAPORATION RATE (n-BuAc=1): Not Applicable MELTING/FREEZING POINT: No Data Available **BOILING POINT: No Data Available pH:** 7.5-9.0 **SPECIFIC GRAVITY: 1.06-1.09** FLAMMABLILITY (SOLID/GAS): Not Applicable **AUTO IGNITION TEMPERATURE:** Not Applicable VISCOSITY: No Data Available

APPEARANCE and COLOR: This product is a yellow liquid.

10. STABILITY and REACTIVITY

STABILITY: Product is stable under normal conditions. **DECOMPOSITION PRODUCTS:** No Data Available. MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: No Data Available. HAZARDOUS POLYMERIZATION: Will not occur. CONDITIONS TO AVOID: No Data Available.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

Ethylhexanoic acid CAS# 149-57-5 LD50-Oral, Rat, 2,043 mg/kg Ethylene glycol CAS# 107-21-1 LD50-Oral, Rat, 4,700 mg/kg SUSPECTED CANCER AGENT: This product does not contain ingredient(s) designated as probable or suspected human carcinogens. **IRRITANCY OF PRODUCT:** Contact with this product is not expected to be irritating. **REPRODUCTIVE TOXICITY INFORMATION:** This product does contain components which are designed as reproductive hazards.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL STABILITY: No data available for this product.

EFFECT OF MATERIAL ON PLANTS or ANIMALS: No data available for this product.

EFFECT OF CHEMICAL ON AQUATIC LIFE:

Ethvlhexanoic acid CAS# 149-57-5 LC50-Fish-96h->100 mg/L

EC50-Waterflea-48h->85.4 mg/L

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains, or in water courses. Waste disposal must be in accordance with appropriate Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

14. TRANSPORTATION INFORMATION

US DOT; IATA; IMO; ADR:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

BULK SHIPMENTS: PROPER SHIPPING NAME:

Environmental Hazardous Substances, Liquid, n.o.s (ethylene glycol) HAZARD CLASS NUMBER and DESCRIPTION: Class 9, Miscellaneous hazardous materials/Products, Substances organisms

UN IDENTIFICATION NUMBER: PACKING GROUP: DOT LABEL(S) REQUIRED:

UN3082 Ш

Miscellaneous hazardous materials/Products, Substances or Organisms

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER: 171

NOTE: Non-bulk Shipments: This material is not a hazardous material as defined by U.S. Department of Transportation at 49CFR parts 100-185.

MARINE POLLUTANT: The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is considered as dangerous goods.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is considered by the United Nations Economic Commission for Europe to be dangerous goods.

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act as follows:

SARA 313 Reporting.

Sara 313 Ethylene glycol CAS# 107-21-1

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): Ethylene glycol CAS# 107-21-1 5000 lbs

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory or are exempted from listing.

Clean Air Act:

None

Clean Water Act:

None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Ingredients within this product are not on the Proposition 65 Lists.

CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are on the DSL Inventory, or are exempted from listing.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: None CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Classified per WHMIS 2015.

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

EU LABELING AND CLASSIFICATION: This product does meet the definition of a hazardous substance or preparation according to EU Regulations (EC) No 1272/2008.

See section 2 for details.

AUSTRALIAN INFORMATION FOR PRODUCT: The components of this product are listed on the International Chemical Inventory list.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

JAPANESE ENCS INVENTORY: The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.

POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW: No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory if Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftliste List of Toxic Substances: Listed

U.S. TSCA: Listed

16. OTHER INFORMATION

PREPARED BY: DATE OF PRINTING: Chris Eigbrett – (<u>MSDS to GHS Compliance</u>) February 12, 2016

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. Emerald Services, Inc. assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are no adhered to as stipulated in the data sheet. Furthermore, Emerald Services, Inc. assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

END OF SDS SHEET