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Diesel Ready Antifreeze 50/50

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Dilmar Diesel Ready Antifreeze 50/50

Part Number: 90286-55

Distributor: Dilmar Oil Co., Inc. 1951 W. Darlington St. Florence, SC 29501

800-922-5823

Emergency Phone Number: During normal business hours – 800-922-5823

Recommend Uses: Antifreeze and coolant

SECTION 2. HAZARD(S) IDENTIFICATIONS

Emergency Overview

Appearance	Liquid
Color	N/A
Odor	Characteristic

GHS Classification:

Acute toxicity (Oral):

Category 4

Specific target organ toxicity

- repeated exposure:

Category 2 (Kidney)

GHS Label Elements:

Hazard pictograms:



Signal word:

Warning

Hazard statements:

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

Precautionary statements:

Prevention:

P264 Wash hands thoroughly after handling.

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

Response:

P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor.

P330 Rinse mouth.

Storage:

No precautionary phrases.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Primary Routes of Entry:

Eye contact

Ingestion

Inhalation

Skin contact

Aggravated Medical Condition:

None Known



Hazardous components which must be listed on the label:
Contains ethanediol.
Contains bittering agent.

Other hazards which do not result in classification

Intentional abuse, misuse or other massive exposure may cause multiple organ damage and or death.

The classification of this material is based on OSHA HCS 2012 criteria.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Mixture of ethylene glycol, water and additives.

Hazardous component(s)

Chemical Name	Synonyms	CAS-No.	Concentration (%)
Ethanediol	ethane-1,2-diol	107-21-1	40 – 60 %
Diethylene glycol	2,2'-oxydiethanol	111-46-6	1 – 3 %

SECTION 4. FIRST-AID MEASURES

If inhaled:	Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
In case of skin contact:	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
In case of eye contact:	Remove contact lenses. Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
If swallowed:	DO NOT DELAY. Rinse mouth with water. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Never give anything by mouth to an unconscious person. Seek medical advice.
Most important symptoms and effects, both acute and delayed:	Kidney toxicity may be recognized by blood in the urine or increased or decreased urine flow. Other signs and symptoms can include nausea, vomiting, abdominal cramps, diarrhea, lumbar pain shortly after ingestion, and possibly narcosis and death. High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Protection of first-aiders:	When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.
Immediate medical attention, special treatment:	IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT! The preferred treatment is immediate transportation to a medical facility and use of appropriate treatment including possible administration of activated



charcoal, gastric lavage and or gastric aspiration. If none of the above are immediately available and a delay of more than one hour is anticipated before such medical attention can be obtained, induction of vomiting may be appropriate using IPECAC syrup (Contraindicated if there are any signs of CNS depression). This should be considered on a case by case basis following specialist advice. Specific other treatments may include ethanol therapy, fomepizole, treatment of acidosis and hemodialysis. Seek specialist advice without delay.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media:	Do not use water in a jet.
Specific hazards during firefighting:	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds.
Special protective equipment for firefighters:	Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Avoid contact with skin and eyes.
Environmental precautions:	Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up:	For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
Additional advice:	For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet. Local authorities should be advised if significant spillages cannot be contained.



U.S. regulations may require reporting releases of this material to the environment which exceed the reportable quantity (refer to Chapter 15) to the National Response Center at (800) 424-8802.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling: Use local exhaust ventilation if there is risk of inhalation of vapors, mists or aerosols.
 Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
 Avoid prolonged or repeated contact with skin.
 Avoid inhaling vapor and/or mists.
 When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
 Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Avoidance of contact: Strong oxidizing agents.

Storage

Other data: Keep container tightly closed and in a cool, well-ventilated place.
 Use properly labeled and closable containers.
 Store at ambient temperature.

Packaging material: Suitable material: For containers or container linings, use mild steel or high density polyethylene.
 Unsuitable material: Zinc. Avoid contact with galvanized materials.

Container Advice: Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ethanediol	107-21-1	C (Aerosol only)	100 mg/m3	ACGIH

Biological occupational exposure limits

No biological limit allocated.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate. Validated exposure measurement methods should be applied by a competent person and samples analyzed by an accredited laboratory. Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods

<http://www.cdc.gov/niosh/> Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods

<http://www.osha.gov/> Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances

<http://www.hse.gov.uk/> Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA) ,

Germany <http://www.dguv.de/inhalt/index.jsp> L'Institut National de Recherche et de Sécurité, (INRS),

France <http://www.inrs.fr/accueil>

**Engineering measures:**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General Information:

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product. Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation. Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Personal protective equipment**Respiratory protection:**

No respiratory protection is ordinarily required under normal conditions of use.

In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.

Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for the combination of organic gases and vapors [Type A/Type P boiling point >65°C (149°F)].

Hand protection material:

Neoprene, Nitrile, Polyvinyl Alcohol (PVA), Viton(R).

Remarks:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection:

Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection:

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Protective measures:

Wash hands and face before breaks and immediately after handling the product. Wash contaminated clothing before re-use.

Ensure that eyewash station and safety shower are proximal to the work-station location.

Hygiene measures:

Remove and wash contaminated clothing and gloves, including the inside, before re-use.

Wash face, hands and any exposed skin thoroughly after handling.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance:	Liquid
Color:	No data available
Odor:	Characteristic
Odor Threshold:	No data available
pH:	No data available
Pour point:	No data available
Melting point/freezing point:	-37 °C / -34 °F (100.0 hPa) Method: Unspecified
Boiling point/boiling range:	>100 °C / 212 °F estimated value(s)
Flash Point:	142 °C / 288 °F Method: ASTM D29
Fire Point:	No data available
Auto-Ignition Temperature:	>200 °C / 329 °F
Decomposition Temperature:	No data available
Evaporation Rate:	No data available
Flammability:	No data available
Upper explosion limit:	Typical 15 % (V)
Lower explosion limit:	Typical 3 % (V)
Vapor pressure:	No data available
Relative vapor density:	No data available
Relative density:	1.128 (15 °C / 59 °F)
Density:	1,128 kg/m ³ (15.0 °C / 59.0 °F) Method: ASTM D4052
Solubility (ies):	
Water solubility:	Completely soluble
Partition coefficient: n- Octanol/water	No data available
Viscosity	
Viscosity, dynamic:	No data available
Conductivity:	This material is not expected to be static accumulator.

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions:	Reacts with strong oxidizing agents. Stable under normal conditions.
Conditions to avoid:	Extremes of temperature and direct sunlight.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Hazardous decomposition products are not expected to form during normal storage.

SECTION 11. TOXICOLOGICAL INFORMATION

Basis for assessment:	Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).
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**Information on likely routes of exposure**

Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Acute Toxicity**Product:**

Acute oral toxicity	LD50 (rat): > 500 - 2,000 mg/kg Remarks: Harmful if swallowed. Remarks: There is a marked difference in acute oral toxicity between rodents and man, man being more susceptible than rodents. The estimated fatal dose for man is 100 milliliters (1/2 cup). This material has also been shown to be toxic and potentially lethal by ingestion to cats and dogs. Ingestion may cause drowsiness and dizziness.
Acute inhalation toxicity	LC 50 (Rat): > 5 mg/l Exposure time: 4 h Remarks: Low toxicity
Acute dermal toxicity	LD50 (Rabbit): > 5,000 mg/kg Remarks: Low toxicity

Skin corrosion/irritation**Product:**

Remarks: Expected to be slightly irritating.

Serious eye damage/eye irritation**Product:**

Remarks: Expected to be slightly irritating.

Respiratory or skin sensitization**Product:**

Remarks: Not expected to be a skin sensitizer.

Germ cell mutagenicity**Product:**

Remarks: Not considered a mutagenic hazard.

Carcinogenicity**Product:**

Remarks: Not expected to be carcinogenic.

IARC

Group 2A: Probably carcinogenic to humans
Sodium nitrate

7631-99-4

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity**Product:**

Remarks: Not expected to impair fertility. Not expected to be a developmental toxicant.

STOT - single exposure**Product:**

Remarks: Not expected to be a hazard.

STOT - repeated exposure**Product:**

Remarks: Kidney: can cause kidney damage.

**Aspiration toxicity****Product:**

Not considered an aspiration hazard.

Further information**Product:**

Remarks: Slightly irritating to respiratory system.

SECTION 12. ECOLOGICAL INFORMATION**Basis for assessment:**

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

Ecotoxicity**Product:**

Toxicity to fish:

Remarks: Expected to be practically nontoxic:
LC/EC/IC50 > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates:

Remarks: Expected to be practically nontoxic:
LC/EC/IC50 > 100 mg

Toxicity to algae:

Remarks: Expected to be practically nontoxic:
LC/EC/IC50 > 100 mg/l

Persistence and degradability**Product:**

Biodegradability:

Remarks: Readily biodegradable.

Bioaccumulative potential**Product:**

Bioaccumulation:

Remarks: Not expected to bioaccumulate significantly.

Mobility in soil**Product:**

Mobility:

Remarks: Liquid under most environmental conditions. If product enters soil, it will be highly mobile and may contaminate groundwater. Dissolves in water.

Other adverse effects

No data available

Product:

Additional ecological information:

Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues:

Recover or recycle if possible. 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



Contaminated packaging: Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Local legislation remarks: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

SECTION 14. TRANSPORTATION INFORMATION

National Regulations

US Department of Transportation Classification (49 CFR Parts 171-180)

UN/ID/NA number: UN 3082
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Ethylene glycol)
 Class: 9
 Packing group: III
 Labels: 9
 Reportable quantity: Ethylene glycol (5,000 lb)
 Marine pollutant: no
 Remarks: This material is not regulated under 49 CFR if in a container of 119 gallon capacity or less.

International Regulation

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollution category: Not applicable
 Ship type: Not applicable
 Product name: Not applicable
 Special precautions: Not applicable

Special precautions for user

Remarks: Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

Additional Information: MARPOL Annex 1 rules apply for bulk shipments by sea.

SECTION 15. REGULATORY INFORMATION

OSHA Hazards: Toxic by ingestion, Carcinogen

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Ethylene Glycol	107-21-1	5000	*
Sodium nitrite	7632-00-0	100	*

*: Calculated RQ exceeds reasonably attainable upper limit.



CERCLA Reportable Quantity

Calculated RQ exceeds reasonably attainable upper limit.

CERCLA Reportable Quantity

Shell classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA.

CERCLA Reportable Quantity

The components with RQs are given for information.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards:

- Acute Health Hazard
- Chronic Health Hazard

SARA 302:

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313:

The following components are subject to reporting levels established by SARA Title III, Section 313:

Ethanediol	107-21-1	55 %
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Clean Water Act

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Sodium nitrite	7632-00-0	0.1671 %
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Pennsylvania Right To Know

Ethanediol	107-21-1
Diethylene glycol	111-46-6
Sodium nitrite	7632-00-0

New Jersey Right To Know

Ethanediol 107-21-1

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

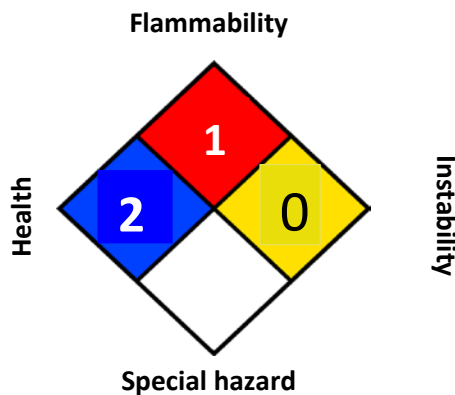
The components of this product are reported in the following inventories:

DSL	Not all components listed
TSCA	All components listed
EINECS	Not all components listed

SECTION 16. OTHER INFORMATION

Further information

NFPA:



0 = not significant, 1 =Slight,
2 = Moderate, 3 = High, 4 = Extreme,* = Chronic

Guide to Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; EPA = Environmental Protection Agency; GHS = Globally Harmonized System; IARC = International Agency for Research on Cancer; INSHT = National Institute for Health and Safety at Work; IOPC = International Oil Pollution Compensation; LEL = Lower Explosive Limit; NE = Not Established; NFPA = National Fire Protection Association; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit (OSHA); SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit (15 minutes); TLV = Threshold Limit Value (ACGIH); TWA = Time Weighted Average (8 hours); UEL = Upper Explosive Limit; WHMIS = Worker Hazardous Materials Information System (Canada)

Prepared by: Dilmar Oil Co., Inc.

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