

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
SDS ID: 31584
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SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Lubrication Technologies, Inc
900 Mendelssohn Ave N
Golden Valley, MN, 55427
USA
T 800-636-7990
www.lubetech.com

1.4. Emergency telephone number

Emergency number : 1-800-424-9300 (CHEMTREC)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Reproductive toxicity Category 1B	H360	May damage fertility or the unborn child
Specific target organ toxicity (repeated exposure) Category 1	H372	Causes damage to organs through prolonged or repeated exposure

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H302 - Harmful if swallowed
H360 - May damage fertility or the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) :

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P308+P313 - If exposed or concerned: Get medical advice/attention.

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P314 - Get medical advice/attention if you feel unwell.
P330 - Rinse mouth.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
ETHYLENE GLYCOL	CAS-No.: 107-21-1	25 – 50	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
POTASSIUM P-TERT-BUTYLBENZOATE	CAS-No.: 16518-26-6	1 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Repr. 1B, H360 STOT RE 1, H372 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
DIETHYLENE GLYCOL	CAS-No.: 111-46-6	< 5	STOT RE 2, H373

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact : None under normal conditions.
Symptoms/effects after eye contact : None under normal conditions.
Symptoms/effects after ingestion : None under normal conditions.

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapors/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray.
Hygiene measures	: Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store locked up.
Packaging materials	: Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ETHYLENE GLYCOL (107-21-1)

USA - ACGIH - Occupational Exposure Limits

Local name	Ethylene glycol
ACGIH OEL TWA	5 mg/m ³ Contains highly refined petroleum oil 25 ppm (Vapor fraction)
ACGIH OEL STEL	10 mg/m ³ (Inhalable fraction, Aerosol only) 50 ppm (Vapor fraction)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2023

USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA	5 mg/m ³ Contains highly refined petroleum oil
OSHA PEL STEL	10 mg/m ³ Contains highly refined petroleum oil

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: red
Odor	: Sweet
Odor threshold	: No data available
pH	: 8.8
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: > 100 °C
Flash point	: > 100 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: ≥ 1.07
Relative density	: No data available
Solubility	: soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

ATE US (oral)	1048.746 mg/kg body weight
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ETHYLENE GLYCOL (107-21-1)

LD50 dermal	> 3500 mg/kg body weight (Mouse, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
ATE US (oral)	500 mg/kg body weight

DIETHYLENE GLYCOL (111-46-6)

LD50 dermal rabbit	11890 mg/kg (Rabbit, Dermal)
LC50 Inhalation - Rat	> 4.6 mg/l air (Other, 4 h, Rat, Weight of evidence, Inhalation (mist))
ATE US (oral)	19600 mg/kg body weight
ATE US (dermal)	11890 mg/kg body weight

POTASSIUM P-TERT-BUTYLBENZOATE (16518-26-6)

ATE US (oral)	500 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

Skin corrosion/irritation : Not classified
pH: 8.8

ETHYLENE GLYCOL (107-21-1)

pH	6 – 7.5 Source: GESTIS
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Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DIETHYLENE GLYCOL (111-46-6)	
pH	5 – 8 (50 %)
Serious eye damage/irritation	: Not classified pH: 8.8
ETHYLENE GLYCOL (107-21-1)	
pH	6 – 7.5 Source: GESTIS
DIETHYLENE GLYCOL (111-46-6)	
pH	5 – 8 (50 %)
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
DIETHYLENE GLYCOL (111-46-6)	
NOAEL (chronic,oral,animal/male,2 years)	1210 mg/kg body weight Animal: rat, Animal sex: male
NOAEL (chronic,oral,animal/female,2 years)	1160 mg/kg body weight Animal: rat, Animal sex: female
Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.
ETHYLENE GLYCOL (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
DIETHYLENE GLYCOL (111-46-6)	
LOAEL (oral,rat,90 days)	40000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
POTASSIUM P-TERT-BUTYLBENZOATE (16518-26-6)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
ETHYLENE GLYCOL (107-21-1)	
Viscosity, kinematic	18.86 mm ² /s (20 °C)
DIETHYLENE GLYCOL (111-46-6)	
Viscosity, kinematic	33 mm ² /s (20 °C)
Symptoms/effects after inhalation	: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact	: None under normal conditions.
Symptoms/effects after eye contact	: None under normal conditions.
Symptoms/effects after ingestion	: None under normal conditions.

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

ETHYLENE GLYCOL (107-21-1)

LC50 - Fish [1]	40761 mg/l (96 h, <i>Salmo gairdneri</i> , Static system)
LC50 - Other aquatic organisms [1]	> 100 mg/l
EC50 - Crustacea [1]	> 10000 mg/l (24 h, <i>Daphnia magna</i>)
EC50 96h - Algae [1]	6.5 – 13 g/l (<i>Selenastrum capricornutum</i> , Growth)
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): <i>Americamysis bahia</i> (previous name: <i>Mysidopsis bahia</i>) Duration: '23 d'

DIETHYLENE GLYCOL (111-46-6)

LC50 - Fish [1]	> 5000 ppm (24 h, <i>Carassius auratus</i>)
EC50 - Crustacea [1]	> 10000 mg/l (24 h, <i>Daphnia magna</i>)
LC50 - Fish [2]	75200 mg/l (Other, 96 h, <i>Pimephales promelas</i> , Flow-through system, Experimental value)
EC50 - Crustacea [2]	> 10000 mg/l (DIN 38412-11, 24 h, <i>Daphnia magna</i> , Static system, Fresh water, Experimental value)
EC50 96h - Algae [1]	9362 mg/l (ECOSAR, Algae, QSAR)
EC50 96h - Algae [2]	9362 mg/l Test organisms (species): other:
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): <i>Americamysis bahia</i> (previous name: <i>Mysidopsis bahia</i>) Duration: '23 d'

12.2. Persistence and degradability

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Persistence and degradability	Not rapidly degradable
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ETHYLENE GLYCOL (107-21-1)

Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.47 g O ₂ /g substance
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance
ThOD	1.29 g O ₂ /g substance
BOD (% of ThOD)	0.36

DIETHYLENE GLYCOL (111-46-6)

Persistence and degradability	Biodegradable in the soil, Biodegradable in water.
Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance
Chemical oxygen demand (COD)	1.51 g O ₂ /g substance
ThOD	1.51 g O ₂ /g substance
BOD (% of ThOD)	0.015

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

POTASSIUM P-TERT-BUTYLBENZOATE (16518-26-6)

Persistence and degradability	Not rapidly degradable
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12.3. Bioaccumulative potential

ETHYLENE GLYCOL (107-21-1)

BCF - Fish [1]	10 (72 h, <i>Leuciscus idus</i>)
BCF - Other aquatic organisms [1]	0.21 – 0.6 (<i>Procambarus</i> sp., Chronic)
BCF - Other aquatic organisms [2]	190 (24 h, Algae)
Partition coefficient n-octanol/water (Log Pow)	-1.34 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.

DIETHYLENE GLYCOL (111-46-6)

BCF - Fish [1]	100 (Other, 3 day(s), <i>Leuciscus melanotus</i> , Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-1.98 (Calculated, Other)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

ETHYLENE GLYCOL (107-21-1)

Mobility in soil	0.2 Source: HSDB
Surface tension	48 mN/m (20 °C)
Ecology - soil	No (test)data on mobility of the substance available.

DIETHYLENE GLYCOL (111-46-6)

Surface tension	0.0485 N/m
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

DOT NA No : UN3082

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s. (ETHYLENE GLYCOL)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 9

Hazard labels (DOT) : 9



14.4. Packing group

Packing group (DOT) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Non Bulk: Not regulated by the US D.O.T. (in quantities under 5,000 lbs in any one inner package).

DOT

UN-No.(DOT) : UN3082

DOT Packaging Exceptions (49 CFR 173.xxx) : 155

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 241

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
ETHYLENE GLYCOL	107-21-1	Present	Active	
DIETHYLENE GLYCOL	111-46-6	Present	Active	
POTASSIUM P-TERT-BUTYLBENZOATE	16518-26-6	Present	Active	

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ETHYLENE GLYCOL (107-21-1)

Subject to reporting requirements of United States SARA Section 313
Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb
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15.2. International regulations

CANADA

ETHYLENE GLYCOL (107-21-1)

Listed on the Canadian DSL (Domestic Substances List)

DIETHYLENE GLYCOL (111-46-6)

Listed on the Canadian DSL (Domestic Substances List)

POTASSIUM P-TERT-BUTYLBENZOATE (16518-26-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

ETHYLENE GLYCOL (107-21-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

DIETHYLENE GLYCOL (111-46-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

ETHYLENE GLYCOL (107-21-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
No	Yes	No	No		8700 µg/day (oral)

SECTION 16: Other information

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 4/11/2024

Full text of H-phrases

H302	Harmful if swallowed
H311	Toxic in contact with skin

Lube-Tech Endurance-HD Global OAT Antifreeze/Coolant 50/50 Premix (Red)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases	
H332	Harmful if inhaled
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.