

Material Safety Data Sheet

According to 1907/2006/EC, Article 31



Printing Date: 09 June 2020

Revision: 19 January 2017

(Page 1 of 8)

1 Identification of the substance/preparation and of the company/undertaking

Trade name: **linelube Antifreeze Blue Pre-Mixed 50/50**

Relevant identified uses of the substance or mixture and uses advised against:

- Use of the substance/mixture: Cooling / Heating medium and Antifreeze
- Use advised against: Do not use in any other application

Supplier:

Online Lubricants Ltd.
Unit 20, The IO Centre, Barking, London IG11 0DR
UK Tel. +44 (0) 208 507 0123

In case of emergency: **+44 (0) 208 507 0123**

2 Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

2.2. Label elements

Hazard statements NC	Not Classified
----------------------	----------------

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

3 Composition / Information on ingredients

3.2. Mixtures

MONOPROPYLENE GLYCOL, 30-60%

CAS number: 57-55-6
EC number: 200-338-0
REACH registration number: 01-2119456809-23-XXXX
Classification: Not Classified

2-ETHYLHEXANOIC ACID, SODIUM SALT 1-5%

CAS number: 19766-89-3
EC number: 243-283-8
REACH registration number: 01-2119488942-23-XXXX
Classification: Repr. 2 - H361d

The full text for all hazard statements is displayed in Section 16.

4 First-aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.

Material Safety Data Sheet

According to 1907/2006/EC, Article 31



Printing Date: 09 June 2020

Revision: 19 January 2017

(Page 2 of 8)

- Skin contact** Remove contaminated clothing. Rinse with water. Get medical attention if any discomfort continues.
- Eye contact** Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

4.2. Most important symptoms and effects, both acute and delayed

- Eye contact** May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

- Notes for the doctor: Treat symptomatically.

5 Fire Fighting Measures

5.1. Extinguishing media

- Suitable extinguishing media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
- Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

- Hazardous combustion products
- Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting

- Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.
- Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

6 Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

- For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions

Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

- Stop leak if possible, without risk. Absorb spillage with non-combustible, absorbent material.
- Collect and place in suitable waste disposal containers and seal securely.
- For waste disposal, see Section 13. Flush contaminated area with plenty of water.

6.4. Reference to other sections

- Reference to other sections: For personal protection, see Section 8.

Material Safety Data Sheet

According to 1907/2006/EC, Article 31



Printing Date: 09 June 2020

Revision: 19 January 2017

(Page 3 of 8)

7 Handling and Storage

7.1. Precautions for safe handling

Usage precautions

- Avoid spilling.
- Avoid contact with skin and eyes.
- Good personal hygiene procedures should be implemented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

- Store in tightly closed, original container in a dry, cool and well-ventilated place.
- Store in closed original container at temperatures between 0°C and 40°C.
- Storage class: Chemical storage.

7.3. Specific end use(s)

- Specific end use(s): The identified uses for this product are detailed in Section 1.2.

8 Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

MONOPROPYLENE GLYCOL

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate

Long-term exposure limit (8-hour TWA): WEL 150 ppm 474 mg/m³ total vapour and particulates

SODIUM HYDROXIDE

Short-term exposure limit (15-minute):

WEL 2 mg/m³

WEL = Workplace Exposure Limit

MONOPROPYLENE GLYCOL (CAS: 57-55-6)

DNEL	General population -	Inhalation; Long term systemic effects: 50 mg/m ³
	General population -	Inhalation; Long term local effects: 10 mg/m ³
	Workers -	Inhalation; Long term systemic effects: 168 mg/m ³
	Workers -	Inhalation; Long term local effects: 10 mg/m ³
	General population -	Dermal; Long term systemic effects: 213 mg/m ³
	General population -	Oral; Long term systemic effects: 85 mg/m ³

PNEC	-	Fresh water; 260 mg/l
	-	Marine water; 26 mg/l
	-	STP; 20000 mg/l
	-	Sediment (Freshwater); 572 mg/kg
	-	Sediment (Marine water); 57.2 mg/kg
	-	Soil; 50 mg/kg
-	Intermittent release; 183 mg/l	

METHYL 1H BENZOTRIAZOLE (CAS: 29385-43-1)

DNEL	Workers -	Dermal; Long term systemic effects: 0.5 mg/kg/day
	Workers -	Inhalation; Long term systemic effects: 8.8 mg/m ³
	Consumer -	Oral; Short term systemic effects: 0.25 mg/kg/day
	Consumer -	Oral; Long term systemic effects: 0.25 mg/kg/day
	Consumer -	Dermal; Long term systemic effects: 0.25 mg/kg/day
	Consumer -	Inhalation; Long term systemic effects: 4.4 mg/m ³

PNEC	-	Fresh water; 0.008 mg/l
	-	Marine water; 0.008 mg/l

Material Safety Data Sheet

According to 1907/2006/EC, Article 31



Printing Date: 09 June 2020

Revision: 19 January 2017

(Page 4 of 8)

Intermittent release; 0.086 mg/l
Sediment (Freshwater); 0.0025 mg/kg/day
Sediment (Marine water); 0.0025 mg/kg/day
Soil; 0.0024 mg/kg/day
STP; 39.4 mg/l

DIHYDROGEN (ETHYL)[4-[4-[ETHYL(3-SULPHONATOBENZYL)]AMINO]-2'-SULPHONATOBENZHYDRYLIDENE]CYCLOHEXA-2,5-DIEN-1-YLIDENE](3-SULPHONATOBENZYL)AMMONIUM, DISODIUM SALT (CAS: 3844-45-9)

Ingredient comments No exposure limits known for ingredient(s).

SODIUM HYDROXIDE (CAS: 1310-73-2)

Ingredient comments WEL = Workplace Exposure Limits
DNEL Consumer - Inhalation; Long term local effects: 1 mg/m³
Workers - Dermal; Short term local effects: 2 mg/kg/day
Workers - Inhalation; Short term local effects: 2 mg/m³
Workers - Inhalation; Long term local effects: 1 mg/m³

8.2. Exposure controls

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. EN 166

Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. EN 374 Rubber (natural, latex). Neoprene. Polyvinyl chloride (PVC).

Respiratory protection No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. It is recommended to use respiratory equipment with combination filter, type A2/P2. EN 136/140/141/145/143/149

9 Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Blue.
Odour threshold	Data lacking.
pH pH (concentrated solution):	7.5 - 9.0
Melting point	Not relevant.
Initial boiling point and range	No information available.
Flash point	No information available.
Evaporation rate	Data lacking.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	Data lacking.
Vapour density	No information available.
Relative density	1.040 @ 20°C
Bulk density	No information available.
Solubility(ies)	Soluble in water.
Partition coefficient	Not known.
Auto-ignition temperature	No information available.
Decomposition Temperature	Data lacking.
Viscosity	Data lacking.
Explosive properties	Data lacking.
Explosive under the influence of a flame:	No information available.
Oxidising properties	Not known.

Material Safety Data Sheet

According to 1907/2006/EC, Article 31



Printing Date: 09 June 2020

Revision: 19 January 2017

(Page 5 of 8)

9.2. Other information

Other information	Not available.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

10 Stability and Reactivity

10.1. Reactivity - Reactivity Hygroscopic.

10.2. Chemical stability - Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions - Possibility of hazardous reactions. Will not polymerise.

10.4. Conditions to avoid - Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials- Strong oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products - Aldehydes. Alcohols. Ethers. Acids.

11 Toxicological Information

11.1. Information on toxicological effects

Skin corrosion/irritation

Animal data No information available.

Serious eye damage/irritation: No information available.

Respiratory sensitisation No information available.

Skin sensitisation No information available.

Germ cell mutagenicity: Genotoxicity - in vitro No information available.

Carcinogenicity No information available.

Reproductive toxicity fertility No information available.

Specific target organ toxicity - single exposure: No information available.

Specific target organ toxicity - repeated exposure No information available.

Aspiration Hazard No information available.

Inhalation May cause respiratory system irritation.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Slightly irritating.

Serious eye damage/irritation Not irritating.

Respiratory sensitisation: No information available.

Skin sensitisation Not sensitising.

Germ cell mutagenicity Genotoxicity - in vitro: This substance has no evidence of mutagenic properties.

Carcinogenicity There is no evidence that the product can cause cancer.

Reproductive toxicity fertility This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure: No information available.

Specific target organ toxicity - repeated exposure: No information available.

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged skin contact may cause temporary irritation.

Eye contact May cause temporary eye irritation.

12 Ecological Information

Ecotoxicity: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Ecological information on ingredients: MONOPROPYLENE GLYCOL

Material Safety Data Sheet

According to 1907/2006/EC, Article 31



Printing Date: 09 June 2020

Revision: 19 January 2017

(Page 6 of 8)

Ecotoxicity: The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity `Not considered toxic to fish.

Ecological information on ingredients.

MONOPROPYLENE GLYCOL

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 40613 mg/l, Oncorhynchus mykiss (Rainbow trout)

LC50, 96 hour: 55770 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates: EC50, 48 hours: > 4000 mg/l, Daphnia magna

Acute toxicity - aquatic plants: EC50, 96 hours: 19000 mg/l, Scenedesmus subspicatus

NOEC, 96 hour: 15000 mg/l, Scenedesmus subspicatus

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates: NOEC, 7 days: 13020 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability

There are no data on the degradability of this product.

Ecological information on ingredients.

MONOPROPYLENE GLYCOL

Persistence and degradability:

The substance is readily biodegradable.

Biodegradation -

Degradation 81%: > 28 days

OECD 301F

Degradation 96%: 64 days

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not known.

Ecological information on ingredients.

MONOPROPYLENE GLYCOL

Bioaccumulative potential

The product is not bioaccumulating. BCF: < 100,

Partition coefficient

log Pow: -1.07

12.4. Mobility in soil

Mobility

The product is soluble in water.

Ecological information on ingredients.

MONOPROPYLENE GLYCOL

Mobility

The product is soluble in water.

Henry's law constant

0.00566 atm m³/mol @ 12°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: vPvB.

This product does not contain any substances classified as PBT or

Ecological information on ingredients.

MONOPROPYLENE GLYCOL

Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects

None known

Ecological information on ingredients.

MONOPROPYLENE GLYCOL

Other adverse effects

No information required.

Material Safety Data Sheet

According to 1907/2006/EC, Article 31



Printing Date: 09 June 2020

Revision: 19 January 2017

(Page 7 of 8)

13 Disposal Considerations

13.1. Waste treatment methods

General information
Disposal methods

Waste should be treated as controlled waste.
Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

14 Transport Information

14.1. General Information

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

- UN number: Not applicable.
- UN proper shipping name: Not applicable.
- Transport hazard class(es): No transport warning sign required.
- Packing group: Not applicable.
- Environmental hazards:
 - Environmentally hazardous substance/marine pollutant: No.
 - Special precautions for user: Not applicable.
- Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable.

15 Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

- EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
- Commission Regulation (EU) No 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

- No chemical safety assessment has been carried out.

16 Other Information

Abbreviations and acronyms used in the safety data sheet

ATE:	Acute Toxicity Estimate.
ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN:	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
CAS:	Chemical Abstracts Service.
DNEL:	Derived No Effect Level.
IATA:	International Air Transport Association.
IMDG:	International Maritime Dangerous Goods.
Kow:	Octanol-water partition coefficient.
LC ₅₀ :	Lethal Concentration to 50 % of a test population.
LD ₅₀ :	Lethal Dose to 50% of a test population (Median Lethal Dose).
PBT:	Persistent, Bioaccumulative and Toxic substance.
PNEC:	Predicted No Effect Concentration.
REACH:	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
RID:	European Agreement concerning the International Carriage of Dangerous Goods by Rail.
vPvB:	Very Persistent and Very Bioaccumulative.
IARC:	International Agency for Research on Cancer.

MARPOL 73/78:

Material Safety Data Sheet

According to 1907/2006/EC, Article 31



Printing Date: 09 June 2020

Revision: 19 January 2017

(Page 8 of 8)

International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978.

cATpE:	Converted Acute Toxicity Point Estimate.
BCF:	Bioconcentration Factor.
BOD:	Biochemical Oxygen Demand.
EC ₅₀ :	50% of maximal Effective Concentration.
LOAEC:	Lowest Observed Adverse Effect Concentration.
LOAEL:	Lowest Observed Adverse Effect Level.
NOAEC:	No Observed Adverse Effect Concentration.
NOAEL:	No Observed Adverse Effect Level.
NOEC:	No Observed Effect Concentration.
LOEC:	Lowest Observed Effect Concentration.
DMEL:	Derived Minimal Effect Level.
EL50:	Exposure Limit 50
hPa:	Hectopascal
LL50:	Lethal Loading fifty
OECD:	Organisation for Economic Co-operation and Development
POW:	Octanol-water partition coefficient
SCBA:	self-contained breathing apparatus
STP:	Sewage Treatment Plant
VOC:	Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. =	Acute toxicity
Aquatic Acute =	Hazardous to the aquatic environment (acute)
Aquatic Chronic =	Hazardous to the aquatic environment (chronic)

Hazard statements in full

- H361d Suspected of damaging the unborn child.

Key literature references and sources for data

- Supplier's information.