

Product Name: GOLDLINE ANTIFREEZE (BLUE)

Revision Date: 23/12/07

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## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPERATION AND THE COMPANY

PRODUCT NAME	GOLDLINE ANTIFREEZE (BLUE)
SUPPLIER	NORTHERN OILS INDULF HOUSE LINTMILL AB56 4XQ T: (+44)(0)1542 832465 F: (+44)(0)1542 833550 sales@northern oils.co.uk

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS:  
ETHYLENE GLYCOL

INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

Substance Name: ETHYLENE GLYCOL (107-21-1)	Wt% 85-95 Minimum	Label: Xn; R22, S(2)
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### 3. HAZARDS IDENTIFICATION

HARMFUL IF SWALLOWED.

EFFECTS OF OVEREXPOSURE:

Ingestion of ethylene glycol may result in nausea, vomiting, abdominal cramps, convulsions, edema of the lung, cardiopulmonary effects (metabolic acidosis), pneumonia and kidney failure which could result in death. The single lethal dose for humans is about 100m1. Inhalation of high levels of vapours or mists for prolonged periods of time may also result in toxic effects. Harmful effects or illness can result from swallowing this material.

### 4. FIRST AID MEASURES

EYE CONTACT:

Flush thoroughly with water. If irritation occurs, call a doctor.

SKIN CONTACT:

Wash contact areas with soap and water. Remove contaminated Clothing. Launder contaminated clothing before re-use.

INHALATION:

Remove from further exposure. If respiratory irritation, dizziness, Nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with bag-valve-mask device or use mouth-to-mouth resuscitation.

INGESTION:

Seek immediate medical attention. If medical attention will be delayed, contact an emergency medical professional or hospital regarding the induction of vomiting or use of activated charcoal.

Do not induce vomiting or give anything by mouth to a groggy or unconscious person.

NOTE TO DOCTORS:

This product contains methanol, ethylene glycol or diethylene glycol 1(see MSDS Section 2) which, if ingested, is metabolized to toxic metabolites by the enzyme alcohol dehydrogenase, for which ethanol is a competitive antagonist. Administration of oral or intravenous ethanol may arrest further metabolism of these materials. Use of ethanol does not affect toxic metabolites that are already present and is not a substitute for hemodialysis.

## 5. FIRE-FIGHTING MEASURES

**EXTINGUISHING** Carbon dioxide, foam, dry chemical and water fog.

**SPECIAL FIRE FIGHTING PROCEDURES:**

Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from the exposure. Prevent runoff from fire control or dilution from entering waterways or drinking water supply.

**SPECIAL PROTECTIVE EQUIPMENT:**

For fires in enclosed areas, fire fighters **MUST** use self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARDS**

None. Flash point 1180C (IP 36/ASTM D-92) Flammable limits – LEL 3.2%, UEL 15.3%

**NFPA HAZARD ID:**

Health: 1, Flammability: 1, Reactivity: 0

## 6. ACCIDENTAL RELEASE MEASURES

**NOTIFICATION PROCEDURES:**

Report spills as required to appropriate authorities.

**PROCEDURES IF MATERIAL IS SPILLED OR RELEASED:**

Contain and absorb on fire retarded treated sawdust, diatomaceous earth etc. Scrape up and remove. Dispose of at an appropriate waste disposal site in accordance with current applicable laws and regulations and product characteristics at time of disposal.

**ENVIRONMENTAL PRECAUTIONS:**

Prevent spills from entering storm sewers or drains and contact with soil.

**PERSONAL PRECAUTIONS:**

See section 8.

## 7. HANDLING AND STORAGE

**HANDLING:**

Avoid prolonged, repeated skin contact and breathing vapours or mists. Avoid ingestion.

**STORAGE:**

Store only in original container. Store in a cool, dry, well ventilated area away from ignition sources. Empty container contains product residue which may exhibit hazards of product.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**VENTILATION:**

Use in well ventilated area

**RESPIRATORY PROTECTION:**

Approved respiratory protective equipment should be used if ventilation is inadequate and breathing of excessive concentrations of vapours or mists is likely.

**EYE PROTECTION:**

Chemical type goggles should be worn if contact with liquid may occur.

**SKIN PROTECTION:**

If prolonged or repeated skin contact is likely, impervious gloves should be worn. Good personal hygiene practices should always be followed.

**EXPOSURE LIMITS:**

Limits shown for guidance only. Follow applicable regulations.

Ethylene glycol

10mg/cu.m [particulate] / 60mg/ cu.m [vapor] / 125mg/ cu.m [vapour] STEL

Diethylene glycol

23 ppm [100 mg/cu.m]

9. PHYSICAL AND CHEMICAL PROPERTIES
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APPEARANCE	Liquid Hygroscopic Viscous		
COLOUR	Blue		
ODOUR	Odourless		
SOLUBILITY	Miscible with water. Miscible with Acetone Alcohol		
BOILING POINT ( C)	165 @ 760 mm Hg	MELTING POINT ( C)	-12
RELATIVE DENSITY	1.13 @ 20 C	VAPOUR DENSITY (air=1)	2.14
VAPOUR PRESSURE	0.05 kPa @ 20 C	VISCOSITY	21 cps @ 20 C
FLASH POINT ( C)	111 CC (Closed cup)	AUTO IGNITION TEMP. ( C)	400
FLAMMABILITY LIMIT (LOWER %)	3.2		

10. STABILITY AND REACTIVITY
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STABILITY (Thermal, Light, Etc.):  
Stable

CONDITIONS TO AVOID:  
Extreme heat. Material may absorb small amounts of atmospheric moisture.

INCOMPATIBILITY (MATERIALS TO AVOID):  
Strong mineral acids. Strong oxidisers. Alkali or alkaline earth metals. Isocyanates.

HAZARDOUS DECOMPOSITION PRODUCTS:  
Carbon monoxide.

HAZARDOUS POLYMERISATION:  
Will not occur.

11. TOXICOLOGICAL DATA
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TOXICOLOGICAL INFORMATION  
Toxicological information on major component only . As Ethanediol

INGESTION  
Harmful if swallowed

12. ECOLOGICAL INFORMATION
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ECOTOXICITY  
Not regarded as dangerous for the environment

13. DISPOSAL CONSIDERATIONS
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WASTE DIPOSAL:  
The product is suitable for processing by an approved recycling facility or can be disposed of at anylicensed waste disposal site. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

14. TRANSPORT INFORMATION
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RID/ADR: NOT REGULATED BY RID/ADR.  
IMO: NOT REGULATED BY IMO.  
IATA: NOT REGULATED BY IATA.

Transport group not dangerous.  
No other restrictions known.

## 15. REGULATORY INFORMATION

Labeling in accordance with EC directives 67/548/EEC and 1999/45/EC

EEC Label Number: 203-473-3

Contents: Contains Ethylene Glycol.

CAS: 000107-21-1 Index: 603-027-00-1

Classification: Xn Harmful.

R22 Harmful If Swallowed.

Safety Phrase: S2 Keep Out Of Reach Of Children.  
S13 Keep away from food, drink and animal feeding stuffs.  
S46 If swallowed, seek medical advice and show container or label.  
S24/25 Avoid contact with skin and eyes.  
S56 Dispose of this material and its container to hazardous or special waste collection point

### UK REGULATORY REFERENCES

The Control of Substances Hazardous to Health Regulations 1

Health and Safety at Work Act 1974

The Chemical (Hazard Information and Packaging for Supply Regulations) 1993 amended Health and Safety (First Aid) Regulations 1981

CDG Road The Classification Packaging and Labeling Regulations 1

### EU DIRECTIVES

Dangerous Substance Directive 67/548/EE

Dangerous Preparations Directive 1999/45/E

### STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations

Control of Substances Hazardous to Health

### APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Health

### GUIDANCE NOTES

Workplace Exposure Limits EH4

## 16. OTHER INFORMATION

### USE:

Corrosion inhibited engine coolant concentrate

### NOTE:

This product should not be used for any other purpose without expert advice.

### COSHH REGULATIONS:

Product reviewed and considered to be potentially hazardous to Health. The regulations must be followed and measures to control exposure may be necessary.

It is believed that all the information given in this bulletin (which supersedes all previous issues) is accurate at the time of printing. Such information is offered in good faith but without guarantee and without any representation that the product concerned is suitable for any use or application. Without limitation of the foregoing, nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending any license under valid patents.

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Where the information provided herein discloses a potential hazard or hazardous ingredient, adequate warning must be provided to employees and users and appropriate precautions taken, including the practice of good industrial hygiene.