



SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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OPUS ANTIFREEZE BASF TYPE

Revision 1

Revision date 2016-10-05

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	OPUS ANTIFREEZE BASF TYPE
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1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	[SU3] Industrial uses: Uses of substances as such or in preparations at industrial sites; [SU17] General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment; [PC4] Anti-Freeze and de-icing products;
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1.3. Details of the supplier of the safety data sheet

Company	Ferguson & Menzies Ltd
Address	312 Broomloan Road Glasgow G51 2JW
Web	www.fergusonmenzies.co.uk
Telephone	0141-445 3555
Fax	0141-425 1079
Email	info@fergusonmenzies.co.uk
Email address of the competent person	info@fergusonmenzies.co.uk

1.4. Emergency telephone number

Emergency telephone number	0141-445-3555 09.00 - 17.00
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification - 1999/45/EC	Xn; R22 Symbols: Xn: Harmful.
Main hazards	Harmful if swallowed.
2.1.2. Classification - EC 1272/2008	Acute Tox. 4: H302; Repr. 1B: H360FD;

2.2. Label elements

Hazard pictograms	
Signal Word	Danger
Hazard Statement	Acute Tox. 4: H302 - Harmful if swallowed. Repr. 1B: H360FD - May damage fertility. May damage the unborn child.
Precautionary Statement: Prevention	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P264 - Wash thoroughly after handling.

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2.2. Label elements

Precautionary Statement: Response	P270 - Do no 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/doctor/ /if you feel unwell. P308+P313 - IF exposed or concerned: Get medical advice/attention. P330 - Rinse mouth.
Precautionary Statement: Storage	P405 - Store locked up.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to

SECTION 3: Composition/information on ingredients

3.2. Mixtures

67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
ETHANEDIOL (Ethane-1,2-diol particulate)	603-027-00-1	107-21-1	203-473-3			Xn; R22	
disodium tetraborate pentahydrate	005-011-02-9	12179-04-3	215-540-4			Repr. Cat. 2; R60-61	
Sodium nitrite	007-010-00-4	7632-00-0	231-555-9			O; R8 T; R25 N; R50	

EC 1272/2008

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ETHANEDIOL (Ethane-1,2-diol particulate)	603-027-00-1	107-21-1	203-473-3			Acute Tox. 4: H302;	
disodium tetraborate pentahydrate	005-011-02-9	12179-04-3	215-540-4			Repr. 1B: H360FD;	
Sodium nitrite	007-010-00-4	7632-00-0	231-555-9			Ox. Sol. 3: H272; Acute Tox. 3: H301; Aquatic Acute 1: H400;	

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Harmful by inhalation. Inhalation may cause nausea and vomiting. May cause dizziness and headache. Move the exposed person to fresh air. Seek medical attention.
Eye contact	May cause irritation to eyes. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
Skin contact	May cause irritation to skin. May cause dermatitis. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Ingestion	Harmful if swallowed. Ingestion may cause nausea and vomiting. Ingestion is irritating to the respiratory tract and may cause damage to the central nervous system. DO NOT INDUCE VOMITING. If swallowed, seek medical advice immediately and show this container or label.

SECTION 5: Firefighting measures

5.1. Extinguishing media

	Use as appropriate: Carbon dioxide (CO2), Dry chemical, Foam.
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5.2. Special hazards arising from the substance or mixture

	Burning produces irritating, toxic and obnoxious fumes.
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5.3. Advice for firefighters

	Self-contained breathing apparatus. Wear protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Ensure adequate ventilation of the working area. Wear suitable protective equipment.
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6.2. Environmental precautions

Do not allow product to enter drains. Prevent further spillage if safe.

6.3. Methods and material for containment and cleaning up

Absorb with inert, absorbent material. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a cool, dry, well ventilated area. Keep containers tightly closed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Exposure Limit Values

ETHANEDIOL (Ethane-1,2-diol particulate)	WEL 8-hr limit ppm: -	WEL 8-hr limit mg/m3: 10
	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -
	WEL 8-hr limit mg/m3 total - inhalable dust:	WEL 15 min limit mg/m3 total - inhalable dust:
	WEL 8-hr limit mg/m3 total - respirable dust:	WEL 15 min limit mg/m3 total - respirable dust:
ETHANEDIOL (Ethane-1,2-diol vapour)	WEL 8-hr limit ppm: 20	WEL 8-hr limit mg/m3: 52
	WEL 15 min limit ppm: 40	WEL 15 min limit mg/m3: 104
	WEL 8-hr limit mg/m3 total - inhalable dust:	WEL 15 min limit mg/m3 total - inhalable dust:
	WEL 8-hr limit mg/m3 total - respirable dust:	WEL 15 min limit mg/m3 total - respirable dust:

8.2. Exposure controls

8.2.1. Appropriate engineering controls	Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Wear chemical protective clothing.
Eye / face protection	Approved safety goggles.
Skin protection - Handprotection	Chemical resistant gloves (PVC).
Respiratory protection	Self-contained breathing apparatus. Wear protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Green
Odour	Odourless
pH	7 - 9
Freezing Point	-18 °C
Initial boiling point	165 °C
Relative density	1.12 - 1.125

SECTION 10: Stability and reactivity

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10.2. Chemical stability

Stable under normal conditions.

SECTION 11: Toxicological information

11.1.4. Toxicological Information

OPUS ANTIFREEZE BASF TYPE	Oral Rat LD50: >300 - 2000 mg/kg	Dermal Rabbit LD50: >5000 mg/kg
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SECTION 12: Ecological information

12.1. Toxicity

OPUS ANTIFREEZE BASF TYPE	Green algae EC50/96h: 6500-13000 mg/l	Green Algae EC50/48h: >100 mg/l
	Guppy LC50/96h: 72860 mg/l	

SECTION 13: Disposal considerations

General information

Dispose of in compliance with all local and national regulations.

SECTION 14: Transport information

14.1. UN number

The product is not classified as dangerous for carriage.

14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)

The product is not classified as dangerous for carriage.

14.4. Packing group

The product is not classified as dangerous for carriage.

14.5. Environmental hazards

The product is not classified as dangerous for carriage.

14.6. Special precautions for user

The product is not classified as dangerous for carriage.

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

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

SECTION 16: Other information

Other information

Revision	<p>This document differs from the previous version in the following areas:</p> <ul style="list-style-type: none"> 2 - 2.1.2. Classification - EC 1272/2008. 2 - Signal Word. 2 - Precautionary Statement: Prevention. 2 - Precautionary Statement: Response. 2 - Precautionary Statement: Storage. 2 - Precautionary Statement: Disposal. 9 - 9.1. Information on basic physical and chemical properties (Colour). 9 - 9.1. Information on basic physical and chemical properties (PH).
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Other information

	<p>9 - 9.1. Information on basic physical and chemical properties (Initial boiling point). 9 - 9.1. Information on basic physical and chemical properties (Flash point). 9 - 9.1. Information on basic physical and chemical properties (Autoignition temperature). 9 - 9.1. Information on basic physical and chemical properties (Relative density). 9 - 9.1. Information on basic physical and chemical properties (Freezing Point). 9 - 9.1. Information on basic physical and chemical properties (Upper Explosive Limit). 9 - 9.1. Information on basic physical and chemical properties (Lower Explosive Limit). 12 - 12.1. Toxicity.</p>
<p>Text of risk phrases in Section 3</p>	<p>R8 - Contact with combustible material may cause fire. R22 - Harmful if swallowed. R25 - Toxic if swallowed. R50 - Very toxic to aquatic organisms. R60 - May impair fertility. R61 - May cause harm to the unborn child.</p>
<p>Text of Hazard Statements in Section 3</p>	<p>Acute Tox. 4: H302 - Harmful if swallowed. Repr. 1B: H360FD - May damage fertility. May damage the unborn child. Ox. Sol. 3: H272 - May intensify fire; oxidiser. Acute Tox. 3: H301 - Toxic if swallowed. Aquatic Acute 1: H400 - Very toxic to aquatic life.</p>

Further information

	<p>The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.</p>
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