



SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Page 1/5

OPUS FOODGRADE PG ANTIFREEZE

Revision 1

Revision date 2015-06-18

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

1.1. Product identifier

| | |
|--------------|------------------------------|
| Product name | OPUS FOODGRADE PG ANTIFREEZE |
|--------------|------------------------------|

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; [PC4] Anti-Freeze and de-icing products; |
|-------------|------------------------------------------------------------------------------------------------------------------------------------|

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 |
|----------------------------|--------------------------------|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

| | |
|--------------|-----------------------|
| Main hazards | No Significant Hazard |
|--------------|-----------------------|

2.2. Label elements

| | |
|--------------|-----------------------|
| Risk phrases | No Significant Hazard |
|--------------|-----------------------|

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. |
|---------------------------------------------------------------------------|-----------|---------|-----------|---------------------------|--------------|----------------|-----------|
| MONO PROPYLENE GLYCOL (Propane-1,2-diol total vapour and particulates) | | 57-55-6 | 200-338-0 | | 70 - 80% | | |

EC 1272/2008

| Chemical Name | Index No. | CAS No. | EC No. | REACH Registration Number | Conc. (%w/w) | Classification | M-factor. |
|---------------------------------------------------------------------------|-----------|---------|-----------|---------------------------|--------------|----------------|-----------|
| MONO PROPYLENE GLYCOL (Propane-1,2-diol total vapour and particulates) | | 57-55-6 | 200-338-0 | | 70 - 80% | | |

SECTION 4: First aid measures

OPUS FOODGRADE PG ANTIFREEZE

Revision 1
Revision date 2015-06-18

4.1. Description of first aid measures

| | |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation | May cause irritation to mucous membranes. Move the exposed person to fresh air. |
| 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. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist. |
| Ingestion | May cause irritation to mucous membranes. DO NOT INDUCE VOMITING. Seek medical attention if irritation or symptoms persist. |

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

| | |
|--------------|------------------------------------------|
| Skin contact | May cause sensitisation by skin contact. |
|--------------|------------------------------------------|

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

| | |
|--------------|------------------------------------------------------------------|
| Skin contact | If skin irritation or rash occurs: Get medical advice/attention. |
|--------------|------------------------------------------------------------------|

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--|-------------------------------------------------------------------------|
| | Use extinguishing media appropriate to the surrounding fire conditions. |
|--|-------------------------------------------------------------------------|

5.2. Special hazards arising from the substance or mixture

| | |
|--|---------------------------------------------------------|
| | Burning produces irritating, toxic and obnoxious fumes. |
|--|---------------------------------------------------------|

5.3. Advice for firefighters

| | |
|--|-----------------------------------------------------|
| | Wear suitable respiratory equipment when necessary. |
|--|-----------------------------------------------------|

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|--|--------------------------------------------------|
| | Ensure adequate ventilation of the working area. |
|--|--------------------------------------------------|

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. Sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water. |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------|

6.4. Reference to other sections

| | |
|--|----------------------------------------|
| | See section 8 for further information. |
|--|----------------------------------------|

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. Store in correctly labelled containers. |
|--|--------------------------------------------------------------------------------------------------------------------|

7.3. Specific end use(s)

| | |
|--|------------------------------------------|
| | See section 1.2 for further information. |
|--|------------------------------------------|

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|--|-----------------------------------------------------------------------------------|
| | Adopt best Manual Handling considerations when handling, carrying and dispensing. |
|--|-----------------------------------------------------------------------------------|

8.1.1. Exposure Limit Values

OPUS FOODGRADE PG ANTIFREEZE

Revision 1

Revision date 2015-06-18

8.1.1. Exposure Limit Values

| | | |
|----------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------|
| MONO PROPYLENE GLYCOL (Propane-1,2-diol particulates) | 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: - |
| | MONO PROPYLENE GLYCOL (Propane-1,2-diol total vapour and particulates) | WEL 8-hr limit ppm: 150 |
| | 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: - |

8.2. Exposure controls

| | |
|-----------------------------------------|------------------------------------------------------|
| 8.2.1. Appropriate engineering controls | Ensure adequate ventilation of the working area. |
| 8.2.2. Individual protection measures | Wear protective clothing. |
| Eye / face protection | In case of splashing, wear: Approved safety goggles. |
| Skin protection - Handprotection | Chemical resistant gloves (PVC). |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--------------------------|--------------------------|
| Appearance | Liquid |
| Colour | Colourless |
| Odour | Odourless |
| Melting point | < -20 °C |
| Initial boiling point | 184 °C |
| Flash point | 104 °C |
| Evaporation rate | 0.01 |
| Upper Explosive Limit | 12.5 % |
| Lower Explosive Limit | 2.6 % |
| Vapour pressure | 20 Pa |
| Vapour density | 2.6 |
| Relative density | 1.05 (H2O = 1 @ 20 °C) |
| Partition coefficient | -1.07 |
| Autoignition temperature | > 400 °C |
| Viscosity | 43.4 mPas (Cone & Plate) |
| Solubility | Soluble in water |

SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|--|--------------------|
| | No data available. |
|--|--------------------|

10.2. Chemical stability

| | |
|--|---------------------------------|
| | Stable under normal conditions. |
|--|---------------------------------|

10.3. Possibility of hazardous reactions

| | |
|--|----------------------------------------------------------------------------------|
| | Hazardous reactions will not occur under normal transport or storage conditions. |
|--|----------------------------------------------------------------------------------|

10.4. Conditions to avoid

OPUS FOODGRADE PG ANTIFREEZE

Revision 1
Revision date 2015-06-18

10.4. Conditions to avoid

Heat, sparks and open flames.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

Do not breathe gas/fumes/vapour/spray.

SECTION 11: Toxicological information

11.1.4. Toxicological Information

| | | |
|---------------------------------|---------------------------------|----------------------|
| OPUS FOODGRADE PG ANTIFREEZE | Inhalation Rat LC50/2 h: 317402 | Oral Rat LD50: 22000 |
| | Dermal Rabbit LD50: 2000 | |

No data is available on this product.

SECTION 12: Ecological information

12.1. Toxicity

| | | |
|---------------------------------|-----------------------------------|--------------------------------|
| OPUS FOODGRADE PG ANTIFREEZE | Daphnia EC50/48h: 18340.0000 mg/l | Fish LC50/96h: 40613.0000 mg/l |
| | Green algae EC50/96h: 19000 | |

12.3. Bioaccumulative potential

Partition coefficient

OPUS FOODGRADE PG -1.07
ANTIFREEZE

Further information

No data is available on this product.

SECTION 13: Disposal considerations

General information

Dispose of in compliance with all local and national regulations.

Disposal methods

Contact a licensed waste disposal company.

Disposal of packaging

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.

OPUS FOODGRADE PG ANTIFREEZE

Revision 1

Revision date 2015-06-18

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.

Further information

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

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

COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

SECTION 16: Other information

Other information

Revision

This document differs from the previous version in the following areas:.

1 - CAS No.

1 - EC No.

9 - 9.1. Information on basic physical and chemical properties (Relative density).

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).

9 - 9.2. Other information (Partition coefficient).

11 - 11.1.4. Toxicological Information.

12 - 12.1. Toxicity.

Further information

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.