

PROTEX ANTI-FREEZE

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Revision No: 2

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

1.1. Product identifier

Product name: PROTEX ANTI-FREEZE

REACH registered number(s): 01-2119456816-28-XXX

CAS number: 107-21-1

EINECS number: 203-473-3

Index number: 603-027-00-1

Synonyms: MONOETHYLENE GLYCOL

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: Wet central heating system anti-freeze. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company name: Excel Industries

Coolmine Industrial Estate Clonsilla Rd Dublin 15 Ireland Tel: +353 18118701 Fax: +353 18118786 Email: sales@excel-industries.com

1.4. Emergency telephone number

Emergency tel: Emergency medical information:

8am-10pm (seven days)

Contact National Poisons Information Centre,

Beaumont Hospital, Dublin 9 DOV2NO, Ireland.

Telephone Number: +353 (0)1 809 2166

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: STOT RE 2: H373; Acute Tox. 4: H302

Most important adverse effects: May cause damage to organs ([kidneys]) through prolonged or repeated exposure

([oral]). Harmful if swallowed.

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| 2.2. Label elements | |
|---------------------------|---|
| Label elements: | |
| Hazard statements: | H373: May cause damage to organs ([kidneys]) through prolonged or repeated exposure |
| | ([oral]). |
| | H302: Harmful if swallowed. |
| Hazard pictograms: | GHS08: Health hazard |
| | GHS07: Exclamation mark |
| | |
| Signal words: | Warning |
| Precautionary statements: | P260: Do not breathe dust/fumes/gas/mist/vapours/spray. |
| | P501: Dispose of contents/container to hazardous or special waste collection point. |
| | P264: Wash hands thoroughly after handling. |
| | P314: Get medical advice/attention if you feel unwell. |
| | P102: Keep out of reach of children. |
| Haz. ingredients (label): | MONOETHYLENE GLYCOL |
| 2.3. Other hazards | |

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: MONOETHYLENE GLYCOL CAS number: 107-21-1 EINECS number: 203-473-3

REACH registered number(s): 01-2119456816-28-XXX

Section 4: First aid measures

4.1. Description of first aid measures

| Skin contact: | Remove all contaminated clothes and footwear immediately unless stuck to skin. | | |
|---|---|--|--|
| | Drench the affected skin with running water for 10 minutes or longer if substance is still | | |
| | on skin. Consult a doctor. | | |
| Eye contact: | Bathe the eye with running water for 15 minutes. Consult a doctor. | | |
| Ingestion: | Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water | | |
| to drink immediately. Consult a doctor. | | | |
| Inhalation: | Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a | | |
| | doctor. | | |
| | | | |

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

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding. Alert the neighbourhood to the presence of fumes or gas.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

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Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

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| Туре | Exposure | Value | Population | Effect |
|------|------------|-----------|------------|----------|
| DNEL | Inhalation | 35 mg/m3 | Workers | Local |
| DNEL | Dermal | 106 mg/kg | Workers | Systemic |
| DNEL | Inhalation | 7 mg/m3 | Consumers | Local |
| DNEL | Dermal | 53 mg/kg | Consumers | Systemic |

8.2. Exposure controls

Engineering measures:Ensure there is sufficient ventilation of the area.Respiratory protection:Self-contained breathing apparatus must be available in case of emergency.Hand protection:Impermeable gloves.Eye protection:Safety glasses. Ensure eye bath is to hand.Skin protection:Impermeable protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| State: | Liquid |
|----------------------|----------------------|
| Colour: | Colourless |
| Odour: | Characteristic odour |
| Evaporation rate: | No data available. |
| Oxidising: | No data available. |
| Solubility in water: | Miscible |
| Also soluble in: | Polar solvents |
| Viscosity: | Non-viscous |

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| Kinematic viscosity: | 16.1 mPa.s | | |
|-------------------------------|-----------------|------------------------------|-----------------|
| Boiling point/range°C: | 197.4 | Melting point/range°C: | -13 |
| Flammability limits %: lower: | Not applicable. | upper: | Not applicable. |
| Flash point°C: | 111 | Part.coeff. n-octanol/water: | log Kow -1.36 |
| Autoflammability°C: | Not applicable. | Vapour pressure: | 0.123 hPa |
| Relative density: | 1.1 | pH: | Approx. 7 |
| | | | |

9.2. Other information

Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

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

Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat. Hot surfaces. Flames.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

| Route | Species | Test | Value | Units |
|-------|---------|------|-------|-------|
| IVN | RAT | LD50 | 3260 | mg/kg |
| ORL | MUS | LD50 | 5500 | mg/kg |
| ORL | RAT | LD50 | 4700 | mg/kg |

Relevant hazards for product:

| Hazard Route | Basis |
|--------------|-------|
|--------------|-------|

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| Acute toxicity (ac. tox. 4) | ING | Hazardous: calculated |
|-----------------------------|-----|-----------------------|
| STOT-repeated exposure | - | Hazardous: calculated |

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach

pain may occur. There may be vomiting.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

| Species | Test | Value | Units |
|--|----------|------------|-------|
| FISH | 96H LC50 | 72860 | mg/l |
| Daphnia magna | 48H EC50 | >100 | mg/l |
| GREEN ALGA (Selenastrum capricornutum) | 96H EC50 | 6500-13000 | mg/l |

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal

company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

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Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

Specific regulations: Safety, Health and Welfare at Work Act 2005 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2015 (SI 2015 No. 288) (as amended). 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 (as ammended).

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

| Other information | |
|------------------------------|--|
| Other information: | European Standards Referenced: |
| | I.S. EN 374-1:2016 Protective Gloves Against Chemicals And Micro-organisms |
| | I.S. EN 143:2000 - Respiratory Protective Devices - Particle Filters - Requirements, |
| | Testing, Marking |
| | I.S. EN 1146:2005 - Respiratory Protective Devices - Self-contained Open-circuit |
| | Compressed Air Breathing Apparatus Incorporating A Hood For Escape - Requirements, |
| | Testing, Marking |
| | I.S. EN 166:2002 - Personal Eye-protection - Specifications. |
| | BS EN 464-1:1994 Protective Clothing For Use Against Liquid And Gaseous Chemicals, |
| | Including Aerosols And Solid Particles - Test Method: Determination Of Leak Tightness |
| | Of Gas Tight Suits (internal Pressure Test) |
| Phrases used in s.2 and s.3: | H302: Harmful if swallowed. |
| | H373: May cause damage to organs ([kidneys]) through prolonged or repeated exposure |
| | ([oral]). |
| Legal disclaimer: | The above information is believed to be correct but does not purport to be all inclusive |
| | and shall be used only as a guide. This company shall not be held liable for any |
| | damage resulting from handling or from contact with the above product. |