



SAFETY DATA SHEET

DEICER

Commission Regulation (EU) No 2015/830 of 28 May 2015.

| SECTION 1: Identification of t | he substance/mixture and of the company/undertaking | |
|--|--|--|
| 1.1. Product identifier | | |
| Product name | DEICER | |
| Product number | 500-400-0006 | |
| 1.2. Relevant identified uses of | of the substance or mixture and uses advised against | |
| Identified uses | De-icing fluid. | |
| 1.3. Details of the supplier of t | he safety data sheet | |
| Supplier | COVENTRY CHEMICALS LTD WOODHAMS RD SISKIN DRIVE COVENTRY CV3 4FX Tel: +44 (0) 02476639739 Fax: +44 (0) 02476639717 Email: sales@coventrychemicals.com | |
| Contact person | For content of safety data sheet:, sds@coventrychemicals.com | |
| 1.4. Emergency telephone number | | |
| Emergency telephone | +44 (0) 1865407333 (Strictly for emergencies only: incidents involving damage to human health and/or the environment) | |
| National emergency telephone number | In case of a medical emergency following exposure to a chemical call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24 | |
| SECTION 2: Hazards identific | ation | |
| 2.1. Classification of the subst | ance or mixture | |
| Classification (EC 1272/2008) | | |
| Physical hazards | Not Classified | |
| Health hazards | STOT RE 2 - H373 | |
| Environmental hazards | Not Classified | |
| 2.2. Label elements | | |
| Pictogram | | |
| | | |
| Signal word | Warning | |
| Hazard statements | H373 May cause damage to organs through prolonged or repeated exposure. | |

| Precautionary statements | P314 Get medical advice/ attention if you feel unwell. P260 Do not breathe fume. P501 Dispose of contents/ container in accordance with local regulations. |
|--------------------------|--|
| Contains | ETHANE-1,2-DIOL |
| Detergent labelling | Contains 2-Bromo-2-nitropropane-1, 3-diol |

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

| 3.2. Mixtures | | |
|--------------------------|----------------------|--|
| ETHANE-1,2-DIOL | | 30-60% |
| CAS number: 107-21-1 | EC number: 203-473-3 | REACH registration number: 01- 2119456816-28-XXXX |
| Classification | Classificatio | on (67/548/EEC or 1999/45/EC) |
| Acute Tox. 4 - H302 | Xn;R22 | |
| STOT RE 2 - H373 | | |
| BRONOPOL (INN) | | <1% |
| CAS number: 52-51-7 | EC number: 200-143-0 | REACH registration number: 01- 2119980938-15-XXXX |
| M factor (Acute) = 10 | | |
| Classification | Classificatio | on (67/548/EEC or 1999/45/EC) |
| Acute Tox. 4 - H302 | Xn;R21/22 | Xi;R37/38,R41 N;R50 |
| Acute Tox. 4 - H312 | | |
| Skin Irrit. 2 - H315 | | |
| Eye Dam. 1 - H318 | | |
| STOT SE 3 - H335 | | |
| Aquatic Acute 1 - H400 | | |
| Aquatic Chronic 2 - H411 | | |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

| SECTION 4: First aid measures | |
|--|--|
| 4.1. Description of first aid measures | |
| General information | Get medical attention immediately. Provide eyewash station and safety shower. Show this Safety Data Sheet to the medical personnel. |
| Inhalation | Remove affected person from source of contamination. Keep affected person warm and at rest. Get medical attention if symptoms are severe or persist. Show this Safety Data Sheet to the medical personnel. |
| Ingestion | Never give anything by mouth to an unconscious person. Do not induce vomiting. Remove person to fresh air and keep comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately. |
| Skin contact | Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing. |

| Eye contact | Remove affected person from source of contamination. 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 immediately. Continue to rinse. |
|--|--|
| Protection of first aiders | First aid personnel should wear appropriate protective equipment during any rescue. |
| 4.2. Most important symptoms | and effects, both acute and delayed |
| General information | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Chemical burns must be treated by a physician. Get medical attention immediately. |
| Inhalation | Vapours may cause headache, fatigue, dizziness and nausea. |
| Ingestion | May cause nausea, headache, dizziness and intoxication. Drowsiness, dizziness, disorientation, vertigo. Danger of serious damage to health by prolonged exposure if swallowed. |
| Skin contact | Prolonged contact may cause redness, irritation and dry skin. |
| Eye contact | May cause temporary eye irritation. |
| 4.3. Indication of any immedia | te medical attention and special treatment needed |
| Notes for the doctor | No specific recommendations. If in doubt, get medical attention promptly. |
| SECTION 5: Firefighting meas | sures |
| 5.1. Extinguishing media | |
| Suitable extinguishing media | The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Use foam, carbon dioxide, dry powder or water fog to extinguish. |
| 5.2. Special hazards arising fr | om the substance or mixture |
| Specific hazards | Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours. Carbon monoxide (CO). Carbon dioxide (CO2). In case of fire and/or explosion do not breathe fumes. |
| Hazardous combustion products | Oxides of carbon. |
| 5.3. Advice for firefighters | |
| Protective actions during firefighting | Control run-off water by containing and keeping it out of sewers and watercourses. |
| Special protective equipment for firefighters | Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. |
| SECTION 6: Accidental release | e measures |
| 6.1. Personal precautions, pro | tective equipment and emergency procedures |
| Personal precautions | Wear protective clothing as described in Section 8 of this safety data sheet. |
| 6.2. Environmental precaution | <u>s</u> |
| Environmental precautions | Avoid or minimise the creation of any environmental contamination. Collect and dispose of spillage as indicated in Section 13. Do not discharge into drains or watercourses or onto the ground. |
| 6.3. Methods and material for | containment and cleaning up |

| Methods for cleaning up | Do not touch or walk into spilled material. Stop leak if safe to do so. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses. | |
|--|---|--|
| 6.4. Reference to other section | s | |
| Reference to other sections | See Section 1 for emergency contact information. For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13. | |
| SECTION 7: Handling and stor | rage | |
| 7.1. Precautions for safe handl | ing | |
| Usage precautions | Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using this product. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. | |
| Advice on general occupational hygiene | Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Wash promptly with soap and water if skin becomes contaminated. Take off immediately all contaminated clothing and wash it before reuse. | |
| 7.2. Conditions for safe storage | e, including any incompatibilities | |
| Storage precautions | Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from food and drink. | |
| Storage class | Corrosive storage. | |
| 7.3. Specific end use(s) | | |
| Specific end use(s) | The identified uses for this product are detailed in Section 1.2. | |
| SECTION 8: Exposure Controls/personal protection | | |
| 8.1. Control parameters Occupational exposure limits ETHANE-1,2-DIOL | | |
| Long-term exposure limit (8-ho Long-term exposure limit (8-ho Sk | ur TWA): WEL 20 ppm 52 mg/m³ vapour ninute): WEL 40 ppm 104 mg/m³ vapour mit | |

ETHANE-1,2-DIOL (CAS: 107-21-1)

DNEL

Industry - Inhalation; Short term systemic effects: 35 mg/m³ Industry - Dermal; Long term : 106 mg/kg/day Consumer - Inhalation; Long term : 7 mg/m³

| PNEC | Fresh water; 10 mg/l Marine water; 1 mg/l Soil; 1.53 mg/l STP; 199.5 mg/l Sediment (Freshwater); 37 mg/kg Sediment (Marinewater); 3.7 mg/kg Intermittent release; 10 mg/l |
|----------------|---|
| | BRONOPOL (INN) (CAS: 52-51-7) |
| DNEL | Workers - Inhalation; Long term systemic effects: 4.1 mg/m³ Workers - Inhalation; Short term systemic effects: 12.3 mg/m³ Workers - Inhalation; Long term local effects: 4.2 mg/m³ Workers - Inhalation; Short term local effects: 4.2 mg/m³ Workers - Dermal; Long term systemic effects: 2.3 mg/kg/day Workers - Dermal; Short term local effects: 7 mg/kg/day Workers - Dermal; Long term local effects: 0.013 mg/cm² Workers - Dermal; Short term local effects: 0.013 mg/cm² Workers - Dermal; Short term local effects: 0.013 mg/cm² General population - Inhalation; Long term systemic effects: 3.7 mg/m³ General population - Inhalation; Short term systemic effects: 1.3 mg/m³ General population - Inhalation; Short term local effects: 1.3 mg/m³ General population - Inhalation; Short term local effects: 1.4 mg/kg/day General population - Dermal; Long term systemic effects: 4.2 mg/kg/day General population - Dermal; Long term local effects: 0.008 mg/cm² General population - Dermal; Long term local effects: 0.008 mg/cm² General population - Dermal; Long term local effects: 0.008 mg/cm² General population - Oral; Short term systemic effects: 1.1 mg/kg/day |
| PNEC | Fresh water; 0.01 mg/l Marine water; 0.008 mg/l Intermittent release; 0.0025 mg/l STP; 0.43 mg/l Sediment (Freshwater); 0.041 mg/kg Sediment (Marinewater); 0.00328 mg/kg Soil; 0.5 mg/kg |
| osure controls | |

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Eye/face protection

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

No specific eye protection required during normal use. 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. Personal protective equipment for eye and face protection should comply with European Standard EN166.

| SECTION 9: Physical and C | hemical Properties |
|---------------------------------|---|
| Environmental exposure controls | Avoid releasing into the environment. Keep container tightly sealed when not in use. |
| Respiratory protection | No specific requirements are anticipated under normal conditions of use. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. |
| Hygiene measures | Provide eyewash station and safety shower. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. |
| Other skin and body protection | Wear appropriate clothing to prevent repeated or prolonged skin contact. Use appropriate skin cream to prevent drying of skin. |
| Hand protection | Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl chloride (PVC). To protect hands from chemicals, gloves should comply with European Standard EN374. Frequent changes are recommended. |

9.1. Information on basic physical and chemical properties

| Appearance | Liquid. |
|--|--|
| Colour | Blue. |
| Odour | Mild. |
| рН | pH (concentrated solution): 7.9 |
| Relative density | 1.039 @ @ 20°C |
| Solubility(ies) | Soluble in water. |
| Explosive under the influence of a flame | Not considered to be explosive. |
| Comments | Information given is applicable to the product as supplied. |
| 9.2. Other information | |
| Other information | None. |
| SECTION 10: Stability and rea | activity |
| 10.1. Reactivity | |
| Reactivity | Under normal conditions of storage and use, no hazardous reactions will occur. |
| 10.2. Chemical stability | |
| Stability | Stable at normal ambient temperatures. |
| 10.3. Possibility of hazardous | reactions |
| Possibility of hazardous reactions | No potentially hazardous reactions known. |
| 10.4. Conditions to avoid | |
| Conditions to avoid | Avoid exposure to high temperatures or direct sunlight. |
| 10.5. Incompatible materials | |
| | |

| Materials to avoid | No specific material or group of materials is likely to react with the product to produce a hazardous situation. |
|-------------------------------------|--|
| 10.6. Hazardous decomposition | on products |
| Hazardous decomposition products | Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO2). |
| SECTION 11: Toxicological in | formation |
| 11.1. Information on toxicolog | ical effects |
| Acute toxicity - oral | |
| Notes (oral LD∞) | LD50 for Ethanediol: 4,700 mg/kg (oral, rat) (Literature). Estimated lethal dose by ingestion of Ethanediol tor humans: 100ml. |
| General information | Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. |
| Inhalation | Vapour may irritate respiratory system/lungs. |
| Ingestion | Harmful if swallowed. Harmful: danger of serious damage to health by prolonged exposure if swallowed. |
| Skin contact | Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking. |
| Eye contact | May cause temporary eye irritation. |
| Acute and chronic health hazards | Gas or vapour is harmful on prolonged exposure or in high concentrations. Narcotic effect. Swallowing concentrated chemical may cause severe internal injury. May cause damage to the liver and kidneys. |
| Route of entry | Ingestion Skin and/or eye contact |
| Target organs | Central nervous system Heart & cardiovascular system Kidneys Liver Respiratory system, lungs Brain |
| Medical symptoms | Nausea, vomiting. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. |
| SECTION 12: Ecological Infor | mation |
| Ecotoxicity | There are no data on the ecotoxicity of this product. Not regarded as dangerous for the environment. |
| 12.1. Toxicity | |
| 12.2. Persistence and degrada | ability |
| Persistence and degradability | The product is readily biodegradable. The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer. |
| 12.3. Bioaccumulative potentia | |
| Bioaccumulative potential | No data available on bioaccumulation. The product does not contain any substances expected to be bioaccumulating. |
| 12.4. Mobility in soil | |
| Mobility | The product is water-soluble and may spread in water systems. |

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB This product does not contain any substances classified as PBT or vPvB. assessment

12.6. Other adverse effects Not known. Other adverse effects Not known. SECTION 13: Disposal considerations Image: Construct of the section of the

SECTION 14: Transport information

General

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

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

| National regulations | The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended). Control of Pollution (Special Waste) Regulations 1980 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. EH40/2005 Workplace exposure limits. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). The Hazardous Waste Regulations 2005. |
|----------------------|--|
| 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). Commission Regulation (EU) No 453/2010 of 20 May 2010. Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (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 Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments. Commission Regulation (EU) No 2015/830 of 28 May 2015. |
| Guidance | CHIP for everyone HSG228. ECHA Guidance on the Application of the CLP Criteria. ECHA Guidance on the compilation of safety data sheets. Technical Guidance WM2: Hazardous Waste. Introduction to Local Exhaust Ventilation HS(G)37. |

15.2. Chemical safety assessment

Currently we do not have information from our suppliers about this.

SECTION 16: Other information

| Abbreviations and acronyms used in the safety data sheet | DNEL: Derived No Effect Level. PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. vPvB: Very Persistent and Very Bioaccumulative. |
|--|--|
| Revision date | 14/06/2017 |
| Revision | 2 |
| Supersedes date | 13/04/2015 |
| SDS number | 10120 |
| Risk phrases in full | R21/22 Harmful in contact with skin and if swallowed. R22 Harmful if swallowed. R37/38 Irritating to respiratory system and skin. R41 Risk of serious damage to eyes. R50 Very toxic to aquatic organisms. |

| Hazard statements in full | H302 Harmful if swallowed. |
|---------------------------|--|
| | H312 Harmful in contact with skin. |
| | H315 Causes skin irritation. |
| | H318 Causes serious eye damage. |
| | H335 May cause respiratory irritation. |
| | H373 May cause damage to organs through prolonged or repeated exposure. |
| | H373 May cause damage to organs (Kidneys, Liver) through prolonged or repeated exposure. |
| | H400 Very toxic to aquatic life. |
| | H411 Toxic to aquatic life with long lasting effects. |