



SAFETY DATA SHEET DE-ICER TRIGGER SPRAY

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010

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

1.1. Product identifier

Product name DE-ICER TRIGGER SPRAY
Product number G61994

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

Identified uses De-icing fluid.

1.3. Details of the supplier of the safety data sheet

Supplier Force Products Ltd
Stock House
Seymour Road
Nuneaton
CV11 4LB

Tel:+44(0)2476322130
Fax:+44(0)2476322151
Email: sales@forceproducts.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0) 1865407333 (Strictly for emergencies only: incidents involving damage to human health and/or the environment)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified
Health hazards STOT RE 2 - H373
Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Xn;R22.

2.2. Label elements

Pictogram



Signal word Warning

DE-ICER TRIGGER SPRAY

Hazard statements	H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	P314 Get medical advice/attention if you feel unwell. P501 Dispose of contents/container in accordance with national regulations. P260 Do not breathe fume.
Contains	ETHANE-1,2-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	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302	Xn;R22

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

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if a large quantity has been ingested. Show this Safety Data Sheet to the medical personnel.
Skin contact	Wash skin thoroughly with soap and water. Remove contaminated clothing. Get medical attention if irritation persists after washing.
Eye contact	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 if irritation persists after washing. Show this Safety Data Sheet to the medical personnel.

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

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 immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

DE-ICER TRIGGER SPRAY

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Foam, carbon dioxide or dry powder.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

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 measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8. Avoid inhalation of spray mist and contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions 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 Stop leak if possible without risk. 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 sections

Reference to other sections 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 storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid spilling. Avoid contact with skin and eyes. 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 the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

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

DE-ICER TRIGGER SPRAY

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate

Long-term exposure limit (8-hour TWA): WEL 20 ppm 52 mg/m³ vapour

Short-term exposure limit (15-minute): WEL 40 ppm 104 mg/m³ vapour

Sk, Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

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

BRONOPOL (INN) (CAS: 52-51-7)

DNEL Workers - Inhalation; Long term systemic effects: 4.1 mg/m³
Workers - Dermal; Long term systemic effects: 2.3 mg/kg/day
General population - Inhalation; Long term systemic effects: 1.2 mg/m³

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

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

Eye protection not normally required. 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. EN 166

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: Polyvinyl chloride (PVC). Rubber (natural, latex). EN 374-3

Other skin and body protection

Use barrier creams to prevent skin contact. Wear appropriate clothing to prevent repeated or prolonged skin contact.

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Hygiene measures	Provide eyewash station and safety shower. When using do not eat, drink or smoke. 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. Use appropriate skin cream to prevent drying of skin.
Respiratory protection	Respiratory protection not normally required. Type approved for mists if OES likely to be exceeded.
Environmental exposure controls	Avoid release to the environment. Users should be aware of environmental considerations and their duties under the environmental protection act. Further information may be found on Government websites: www.dti.gov.uk/access/index/htm and www.envirowise.gov.uk .

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Blue.
Odour	Mild.
Odour threshold	Not applicable. Not applicable.
pH	pH (concentrated solution): 7.9
Melting point	Not applicable.
Initial boiling point and range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not determined.
Evaporation factor	Not applicable.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	1.039 @ @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Not applicable. Soluble in water.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Viscosity	Not determined.
Explosive properties	Not applicable
Oxidising properties	Not applicable.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information	Not relevant.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

DE-ICER TRIGGER SPRAY

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not applicable.

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 products

Hazardous decomposition products Fire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) LD50 for Ethanediol: 4,700 mg/kg (oral, rat) (Literature). Estimated lethal dose by ingestion of Ethanediol for 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 Information

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 degradability

DE-ICER TRIGGER SPRAY

Persistence and degradability There are no data on the degradability of this product. 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 potential

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

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not discharge into drains or watercourses or onto the ground.

Disposal methods Dispose of via an authorised and appropriately licensed waste contractor.

SECTION 14: Transport information

Road transport notes Not classified.

Rail transport notes Not classified.

Sea transport notes Not classified.

Air transport notes Not classified.

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL73/78 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).
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

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).
Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) 1907/2006,

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Guidance Workplace Exposure Limits EH40.
 CHIP for everyone HSG228.
 COSHH Essentials.
 Approved Classification and Labelling Guide (Sixth edition) L131.
 Safety Data Sheets for Substances and Preparations.

15.2. Chemical safety assessment

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

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	13/05/2015
Revision	1
SDS number	20629
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	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. H411 Toxic to aquatic life with long lasting effects. 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 (Kidneys, Liver) through prolonged or repeated exposure. H400 Very toxic to aquatic life. H411 Toxic to aquatic life with long lasting effects.

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 process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.