



## SAFETY DATA SHEET DE ICER

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product name DE ICER  
Product No. ICE, EICEE600, ZE

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

Identified uses De Icer  
Uses advised against At this moment in time we do not have information on use restrictions. They will be included in this safety data sheet when available

#### 1.3. Details of the supplier of the safety data sheet

Supplier ELECTROLUBE. A division of HK  
WENTWORTH LTD  
ASHBY PARK, COALFIELD WAY,  
ASHBY DE LA ZOUCH, LEICESTERSHIRE  
LE65 1JR  
UNITED KINGDOM  
+44 (0)1530 419600  
+44 (0)1530 416640  
info@hkw.co.uk

Supplied by:  
**RS Components Ltd,**  
Birchington Road, Corby, Northants, NN17 9RS.  
Tel: +44 (0) 1536 402888 (8am to 8pm)  
Email: technical.help@rs-components.com

#### 1.4. Emergency telephone number

+44 (0)1530 419600 between 8.30am - 5.00pm Mon – Fri

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R36. F+;R12. R67.

##### Human health

In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

##### Environment

The product is not expected to be hazardous to the environment.

##### Physical and Chemical Hazards

The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. Aerosol containers can explode when heated, due to excessive pressure build-up. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

#### 2.2. Label elements

##### Labelling



Irritant



Extremely flammable

##### Risk Phrases

R12 Extremely flammable.  
R36 Irritating to eyes.  
R67 Vapours may cause drowsiness and dizziness.

##### Safety Phrases

A1 Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

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|     |   |
|-----|---|
| A2  | Do not spray on a naked flame or any incandescent material.                                   |
| S2  | Keep out of the reach of children.  |
| S9  | Keep container in a well-ventilated place.  |
| S16 | Keep away from sources of ignition - No smoking.  |
| S23 | Do not breathe vapour/spray.  |
| S25 | Avoid contact with eyes.  |
| S26 | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| S51 | Use only in well-ventilated areas.  |

**2.3. Other hazards****SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures**

|   |   |
|---|---|
| <b>PROPAN-2-OL</b>  | <b>60-80%</b>   |
| CAS-No.: 67-63-0  | EC No.: 200-661-7                                     |
| Classification (EC 1272/2008)<br>Flam. Liq. 2 - H225<br>Eye Irrit. 2 - H319<br>STOT SE 3 - H336     | Classification (67/548/EEC)<br>F;R11<br>Xi;R36<br>R67 |
| <b>BUTANE</b>   | <b>10-30%</b>   |
| CAS-No.: 106-97-8   | EC No.: 203-448-7                                     |
| Classification (EC 1272/2008)<br>Flam. Gas 1 - H220   | Classification (67/548/EEC)<br>F+;R12                 |
| <b>ISOBUTANE</b>  | <b>5-10%</b>  |
| CAS-No.: 75-28-5  | EC No.: 200-857-2                                     |
| Classification (EC 1272/2008)<br>Flam. Gas 1 - H220   | Classification (67/548/EEC)<br>F+;R12                 |
| <b>ETHANEDIOL</b>   | <b>1-5%</b>   |
| CAS-No.: 107-21-1   | EC No.: 203-473-3                                     |
| Classification (EC 1272/2008)<br>Acute Tox. 4 - H302  | Classification (67/548/EEC)<br>Xn;R22                 |
| <b>SODIUM NITRITE</b>   | <b>&lt; 1%</b>  |
| CAS-No.: 7632-00-0  | EC No.: 231-555-9                                     |
| Classification (EC 1272/2008)<br>Ox. Sol. 3 - H272<br>Acute Tox. 3 - H301<br>Aquatic Acute 1 - H400 | Classification (67/548/EEC)<br>O;R8<br>T;R25<br>N;R50 |

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

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**SECTION 4: FIRST AID MEASURES****4.1. Description of first aid measures****Inhalation**

Move the exposed person to fresh air at once. Get medical attention.

**Ingestion**

Not relevant

**Skin contact**

Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

**Eye contact**

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

**4.2. Most important symptoms and effects, both acute and delayed****4.3. Indication of any immediate medical attention and special treatment needed****SECTION 5: FIREFIGHTING MEASURES****5.1. Extinguishing media****Extinguishing media**

Use: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

**5.2. Special hazards arising from the substance or mixture****Unusual Fire & Explosion Hazards**

Extremely flammable. Forms explosive mixtures with air. May travel considerable distance to source of ignition and flash back. Aerosol cans may explode in a fire.

**5.3. Advice for firefighters****Special Fire Fighting Procedures**

Water spray should be used to cool containers. Move container from fire area if it can be done without risk.

**Protective equipment for fire-fighters**

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective clothing as described in Section 8 of this safety data sheet.

**6.2. Environmental precautions**

Do not discharge into drains, water courses or onto the ground.

**6.3. Methods and material for containment and cleaning up**

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Ventilate well. Absorb in vermiculite, dry sand or earth and place into containers.

**6.4. Reference to other sections**

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. Collect and dispose of spillage as indicated in section 13.

**SECTION 7: HANDLING AND STORAGE****7.1. Precautions for safe handling**

Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Keep away from heat, sparks and open flame. Eliminate all sources of ignition.

**7.2. Conditions for safe storage, including any incompatibilities**

Store at moderate temperatures in dry, well ventilated area. Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

**7.3. Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**8.1. Control parameters**

| Name        | STD | TWA - 8 Hrs |                        | STEL - 15 Min |                        | Notes |
|-------------|-----|-------------|------------------------|---------------|------------------------|-------|
|             |     |             |                        |               |                        |       |
| BUTANE      | WEL | 600 ppm     | 1450 mg/m <sup>3</sup> | 750 ppm       | 1810 mg/m <sup>3</sup> |       |
| PROPAN-2-OL | WEL | 400 ppm     | 999 mg/m <sup>3</sup>  | 500 ppm       | 1250 mg/m <sup>3</sup> |       |

WEL = Workplace Exposure Limit.

**PROPAN-2-OL (CAS: 67-63-0)****DNEL**

|          |             |     |                   |
|----------|-------------|-----|-------------------|
| Industry | Dermal      | 888 | mg/kg/day         |
| Industry | Inhalation. | 500 | mg/m <sup>3</sup> |
| Consumer | Dermal      | 319 | mg/kg/day         |
| Consumer | Inhalation. | 89  | mg/m <sup>3</sup> |
| Consumer | Oral        | 26  | mg/kg/day         |

**PNEC**

|             |       |       |
|-------------|-------|-------|
| Freshwater  | 140.9 | mg/l  |
| Marinewater | 140.9 | mg/l  |
| Sediment    | 552   | mg/kg |
| Soil        | 28    | mg/kg |

**8.2. Exposure controls****Protective equipment****Process conditions**

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

**Engineering measures**

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

**Respiratory equipment**

In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. Use respiratory equipment with combination filter, type A2/P3.

**Hand protection**

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Gloves of nitrile rubber, PVA or Viton are recommended. Gloves should conform to EN374

**Eye protection**

Wear approved chemical safety goggles where eye exposure is reasonably probable. EN166

**Other Protection**

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

**Hygiene measures**

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. DO NOT SMOKE IN WORK AREA!

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties**

|                                |  |
|--------------------------------|--|
| Appearance                     | Aerosol. Liquid                                  |
| Colour                         | Colourless.                                      |
| Odour                          | Characteristic.                                  |
| Solubility                     | Insoluble in water                               |
| Flash point                    | <-40 CC (Closed cup).                            |
| Auto Ignition Temperature (°C) | 410-580  |
| Flammability Limit - Lower(%)  | 1.8  |
| Flammability Limit - Upper(%)  | 9.5  |
| Comments                       | Information given concerns the major ingredient. |

## DE ICER

**9.2. Other information**

Volatility Description                      Volatile

**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity**

There are no known reactivity hazards associated with this product.

**10.2. Chemical stability**

Stable under normal temperature conditions.

**10.3. Possibility of hazardous reactions**

Not determined.

**Hazardous Polymerisation**

Will not polymerise.

**10.4. Conditions to avoid**

Avoid heat, flames and other sources of ignition. Avoid contact with acids and alkalis.

**10.5. Incompatible materials****Materials To Avoid**

Strong acids. Strong oxidising substances.

**10.6. Hazardous decomposition products**

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects****Other Health Effects**

This substance has no evidence of carcinogenic properties.

**General information**

Deliberate concentrating and inhaling the contents of this container is dangerous and can be fatal

**Inhalation**

May cause irritation to the respiratory system. Vapours may cause headache, fatigue, dizziness and nausea. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

**Skin contact**

Product has a defatting effect on skin. Prolonged contact may cause dryness of the skin. Prolonged or repeated exposure may cause severe irritation.

**Eye contact**

Irritating to eyes.

**Health Warnings**

Intentional misuse by concentrating / inhaling contents may be lethal

**Route of entry**

Inhalation.

**Target Organs**

Central nervous system Respiratory system, lungs

**Medical Symptoms**

Arrhythmia, (deviation from normal heart beat). Drowsiness, dizziness, disorientation, vertigo.

**SECTION 12: ECOLOGICAL INFORMATION****Ecotoxicity**

Not regarded as dangerous for the environment. No negative effects on the aquatic environment are known.

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12.1. Toxicity12.2. Persistence and degradability12.3. Bioaccumulative potential12.4. Mobility in soil12.5. Results of PBT and vPvB assessment12.6. Other adverse effects**SECTION 13: DISPOSAL CONSIDERATIONS**

## General information

Do not puncture or incinerate even when empty.

13.1. Waste treatment methods

Empty containers must not be burned because of explosion hazard. Dispose of waste and residues in accordance with local authority requirements.

**SECTION 14: TRANSPORT INFORMATION**14.1. UN number

|                      |      |
|----------------------|------|
| UN No. (ADR/RID/ADN) | 1950 |
| UN No. (IMDG)        | 1950 |
| UN No. (ICAO)        | 1950 |

14.2. UN proper shipping name

Proper Shipping Name                      AEROSOLS

14.3. Transport hazard class(es)

|                     |                |
|---------------------|----------------|
| ADR/RID/ADN Class   | 2.1            |
| ADR/RID/ADN Class   | Class 2: Gases |
| ADR Label No.       | 2.1            |
| IMDG Class          | 2.1            |
| ICAO Class/Division | 2.1            |

## Transport Labels

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

EMS    F-D, S-U

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Tunnel Restriction Code (D)

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

No information required.

**SECTION 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Uk Regulatory References**

Chemicals (Hazard Information &amp; Packaging) Regulations.

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

**Environmental Listing**

Rivers (Prevention of Pollution) Act 1961. Control of Pollution Act 1974. Control of Pollution (Special Waste Regulations) Act 1980.

**Approved Code Of Practice**

Classification and Labelling of Substances and Preparations Dangerous for Supply.

**Guidance Notes**

Workplace Exposure Limits EH40.

**EU Legislation**

System of specific information relating to Dangerous Preparations. 2001/58/EC.

Dangerous Substance Directive 67/548/EEC.

Dangerous Preparations Directive 1999/45/EC.

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.

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), 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, including amendments.

**Authorisations (Title VII Regulation 1907/2006)**

No specific authorisations are noted for this product.

**Restrictions (Title VIII Regulation 1907/2006)**

No specific restrictions of use are noted for this product.

**15.2. Chemical Safety Assessment****SECTION 16: OTHER INFORMATION****General information**

Edit this text

**Revision Comments**

Revised in accordance with CHIP3 and EU Directives 1999/45/EC and 2001/58/EC

**Issued By** Helen O'Reilly**Revision Date** OCTOBER 2012**Revision** 0**Risk Phrases In Full**

|     |   |
|-----|---|
| R8  | Contact with combustible material may cause fire. |
| R12 | Extremely flammable.                              |
| R22 | Harmful if swallowed.                             |
| R11 | Highly flammable                                  |
| R36 | Irritating to eyes.                               |
| R25 | Toxic if swallowed.                               |
| R67 | Vapours may cause drowsiness and dizziness.       |
| R50 | Very toxic to aquatic organisms.                  |

## DE ICER

**Hazard Statements In Full**

|      |  |
|------|--|
| H319 | Causes serious eye irritation.         |
| H220 | Extremely flammable gas.               |
| H224 | Extremely flammable liquid and vapour. |
| H302 | Harmful if swallowed.                  |
| H225 | Highly flammable liquid and vapour.    |
| H336 | May cause drowsiness or dizziness.     |
| H272 | May intensify fire; oxidiser.          |
| H301 | Toxic if swallowed.                    |
| H400 | Very toxic to aquatic life.            |

## Disclaimer

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.