

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

1.1. Product identifier

Product name **DE-ICER**
 Product No. **K198**

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

Identified uses **fast acting, sub zero arctic formula**

1.3. Details of the supplier of the safety data sheet

Selden Research Limited t : 01298 26226
 Staden Lane
 Ashbourne Road f : 01298 26540
 Buxton
 Derbyshire e : safety@selden.co.uk
 SK17 9RZ
 United Kingdom

1.4. Emergency telephone number

01298 26226

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (67/548/EEC) **Xi;R36. F+;R12. R67.**

2.2. Label elements

Labelling



Extremely Flammable



Irritant (Xi)

Risk Phrases **R36 Irritating to eyes., R67 Vapours may cause drowsiness and dizziness., R12 Extremely flammable.**
 Safety Phrases **S2 Keep out of the reach of children.
 S16 Keep away from sources of ignition - No smoking.
 S23 Do not breathe vapour/spray.
 S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S51 Use only in well-ventilated areas.
 S25 Avoid contact with eyes.**

2.3. Other hazards

PRESSURISED CONTAINER - increase in temperature to greater than 50C will cause internal pressure to rise potentially causing bursting/explosion.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not Applicable

3.2. Mixtures

ETHANEDIOL		5-10%
CAS-No.: 107-21-1	EEC (EINECS) No. 203-473-3	
Classification (EC 1272/2008)		Classification (67/548/EEC)
Acute toxicity, category 4 - Oral - H302		Xn;R22
PROPAN-2-OL		60-100%
CAS-No.: 67-63-0	EEC (EINECS) No. 200-661-7	
Classification (EC 1272/2008)		Classification (67/548/EEC)

Flammable liquids, category 2 - H225
Eye irritation, category 2 - H319
STOT***, single exposure, category 3 - Narcotic effects - H336

F;R11
Xi;R36
R67

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

Inhalation	Move the exposed person to fresh air at once., Keep the affected person warm and at rest. Get prompt medical attention., For breathing difficulties oxygen may be necessary.
Ingestion	Rinse mouth thoroughly., Drink plenty of water., Get medical attention.
Skin contact	Wash the skin immediately with soap and water., Get medical attention if any discomfort continues.
Eye contact	Spray in the eyes:., 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

Inhalation	May cause irritation to the respiratory system., Vapours may cause headache, fatigue, dizziness and nausea., Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause burns in mucous membranes, throat, oesophagus and stomach., May cause stomach pain or vomiting.
Skin contact	Prolonged or repeated exposure may cause severe irritation.
Eye contact	Irritation of eyes and mucous membranes.

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

Treat Symptomatically.

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

Unsuitable extinguishing media

5.3. Advice for firefighters

Special Fire Fighting Procedures Self contained breathing apparatus and full protective clothing must be worn in case of fire. Containers close to fire should be removed or cooled with water., Use water to keep fire exposed containers cool and disperse vapours.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For personal protection, see section 8.

6.2. Environmental precautions

Any spillage needs to be contained and not allowed to enter water courses

6.3. Methods and material for containment and cleaning up

Wear necessary protective equipment., Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate., If leakage cannot be stopped, evacuate area.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame., Avoid spilling, skin and eye contact., Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

7.3. Specific end use(s)

See product label for detailed usage and instructions.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs	STEL - 15 Min	Notes
ETHANEDIOL	WEL	52 mg/m3(Sk)	104 mg/m3(Sk)	
PROPAN-2-OL	WEL	400 ppm999 mg/m3	500 ppm1250 mg/m3	

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Engineering measures

Hand protection

Eye protection

Other Protection

Hygiene measures

Provide adequate general and local exhaust ventilation.

Use protective gloves.

Wear approved safety goggles.

General workwear only

DO NOT SMOKE IN WORK AREA!

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Comments	Information given relates to total aerosol container contents.
Flash point (°C)	- 74
Auto Ignition Temperature (°C)	+ 405
Flammability Limit - Upper(%)	1.8
Flammability Limit - Lower(%)	10.0

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under normal temperature conditions.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

None known

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

None known

10.6. Hazardous decomposition products

Fire creates: , Vapours/gases/fumes of: , Carbon monoxide (CO) , Carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information	No toxicological data is available for this mixture, however data can be provided for specific raw materials upon request.
Inhalation	May cause irritation to the respiratory system., Vapours may cause headache, fatigue, dizziness and nausea., Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause burns in mucous membranes, throat, oesophagus and stomach., May cause stomach pain or vomiting.
Skin contact	Prolonged or repeated exposure may cause severe irritation.
Eye contact	Irritation of eyes and mucous membranes.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Not regarded as dangerous for the environment.

12.2. Persistence and degradability

Degradability The product is biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility: The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or PvB substances

12.6. Other adverse effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

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, FLAMMABLE

14.3. Transport hazard class(es)

ADR/RID/ADN Class	2
ADR/RID/ADN Class	Class 2: Gases
IMDG Class	2.1
ICAO Class/Division	2.1
Transport Labels	Not Applicable

14.4. Packing group

14.5. Environmental hazards

Environmentally Hazardous substance/Marine Pollutant No

14.6. Special precautions for user

Tunnel Restriction Code n/a

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

Not relevant

SECTION 15: REGULATORY INFORMATION

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

UK Regulatory References	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 (Special Waste Regulations) Act 1980.
Statutory Instruments	Control of Substances Hazardous to Health., The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).
Approved Code Of Practice	Classification and Labelling of Substances and Preparations Dangerous for Supply.
Guidance Notes	Workplace Exposure Limits EH40., Introduction to Local Exhaust Ventilation HS(G)37., CHIP for everyone HSG (108). System of specific information relating to Dangerous Preparations. 2001/58/EC., Dangerous Preparations Directive 1999/45/EC., 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., 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.
EU Legislation	
National Regulations	The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007 (CDG 2007).

15.2. Chemical Safety Assessment

No chemical assessment has been carried out as this Safety Data Sheet is for a mixture

SECTION 16: OTHER INFORMATION

General information

The following risk phrases relate to the raw materials in the product and not the product itself:-

Revision Comments

Safety Data Sheet revised to be in accordance with EU Regulation No 453/2010 - REACH Regulations.

Revision Date 06/04/2010
Revision 5

Risk Phrases In Full R11 Highly flammable, R36 Irritating to eyes., R67 Vapours may cause drowsiness and dizziness. | R22 Harmful if swallowed. |

Hazard Statements In Full
H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.