



SAFETY DATA SHEET

De Icer

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	De Icer
PRODUCT NO.	007-14
APPLICATION	De-icer
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2 HAZARDS IDENTIFICATION

Flammable. Vapours may cause drowsiness and dizziness. Irritating to eyes.

CLASSIFICATION (1999/45) Xi;R36. R10, R67.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (67/548)
ETHANEDIOL	203-473-3	107-21-1	10-30%	Xn;R22
PROPAN-2-OL	200-661-7	67-63-0	30-60%	F;R11 Xi;R36 R67

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

INHALATION

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INGESTION

DO NOT INDUCE VOMITING! If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Do not give victim anything to drink if he is unconscious. Get medical attention. NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS!

SKIN CONTACT

Remove contaminated clothing. Wash skin with soap and water. Use suitable lotion to moisturise skin. Get medical attention if any discomfort continues.

EYE CONTACT

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

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use fire-extinguishing media appropriate for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES

Cool containers exposed to flames with water until well after the fire is out.

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SPECIFIC HAZARDS

Oxides of: Carbon. Nitrogen.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

For personal protection, see section 8.

ENVIRONMENTAL PRECAUTIONS

Do not discharge onto the ground or into water courses.

SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Large Spillages: Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

Flush area with plenty of water. Ventilate well.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Read and follow manufacturer's recommendations. Avoid spilling, skin and eye contact. During application and drying, solvent vapours will be emitted. Avoid inhalation of vapours.

STORAGE PRECAUTIONS

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

STORAGE CLASS

Flammable liquid storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
ETHANEDIOL	WEL		10 mg/m ³		104 mg/m ³	Sk
PROPAN-2-OL	WEL	400 ppm	999 mg/m ³	500 ppm	1250 mg/m ³	

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

No particular ventilation requirements. Must not be handled in confined space without sufficient ventilation.

HAND PROTECTION

Protective gloves must be used if there is a risk of direct contact or splash. Use protective gloves made of: Butyl rubber. Gloves of nitrile rubber, PVA or Viton are recommended. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

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

OTHER PROTECTION

Provide eyewash station.

HYGIENE MEASURES

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

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid		
COLOUR	Clear Blue		
ODOUR	Odour of alcohol		
SOLUBILITY	Soluble in water. Miscible with: Alcohol		
RELATIVE DENSITY	~ 0.950 @ 20 °c	EVAPORATION RATE	< 1 BuAc=1

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FLASH POINT (°C) 23 CC (Closed cup).

VOLATILE ORGANIC COMPOUND 380 g/litre
(VOC)**10 STABILITY AND REACTIVITY****STABILITY**

Stable under normal temperature conditions.

CONDITIONS TO AVOID

Avoid excessive heat for prolonged periods of time.

HAZARDOUS POLYMERISATION

Will not polymerise.

HAZARDOUS DECOMPOSITION PRODUCTSFire creates: Carbon monoxide (CO). Carbon dioxide (CO₂).**11 TOXICOLOGICAL INFORMATION****INHALATION**

Vapours may cause headache, fatigue, dizziness and nausea.

INGESTION

May cause discomfort if swallowed.

SKIN CONTACT

May cause defatting of the skin, but is not an irritant.

EYE CONTACT

Irritating to eyes.

HEALTH WARNINGS

Because of quantity and composition, the health hazard is small. Serious long-term effects are not known to be related to this type of product.

ROUTE OF ENTRY

Skin and/or eye contact.

MEDICAL SYMPTOMS

No specific symptoms noted, but this chemical may still have adverse health impact, either in general or on certain individuals.

Name	PROPAN-2-OL
Toxic Dose 1 - LD 50	5500 mg/kg (oral rat)
Toxic Conc. - LC 50	47-73 ppm/4h (inh-rat)
Name	ETHANEDIOL

12 ECOLOGICAL INFORMATION**ECOTOXICITY**

Not regarded as dangerous for the environment. The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

MOBILITY

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. The product is partly soluble in water. May spread in the aquatic environment.

BIOACCUMULATION

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

DEGRADABILITY

The surfactant(s) contained in this preparation 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.

Name	PROPAN-2-OL
LC 50, 96 Hrs, FISH mg/l	9600
EC 50, 48 Hrs, DAPHNIA, mg/l	4600
Mobility	
The product is soluble in water.	
Bioaccumulation potential	
Will not bio-accumulate.	
Degradability	
The product is expected to be biodegradable.	
Name	ETHANEDIOL

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13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

The packaging must be empty (drop-free, when inverted) Rags and the like, moistened with flammable liquids, must be discarded into designated fireproof bucket.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements. Do not allow runoff to sewer, waterway or ground.

14 TRANSPORT INFORMATION

UK ROAD CLASS	3		
PROPER SHIPPING NAME	ALCOHOLS, N.O.S. (PROPAN-2-OL)		
UN NO. ROAD	1987	UK ROAD PACK GR.	III
ADR CLASS NO.	3	ADR CLASS	Class 3: Flammable liquids.
ADR PACK GROUP	III	TUNNEL RESTRICTION CODE	(D/E)
HAZARD No. (ADR)	30	ADR LABEL NO.	3
HAZCHEM CODE	3Y	CEFIC TEC(R) NO.	30GF1-III
RID CLASS NO.	3	RID PACK GROUP	III
UN NO. SEA	1987	IMDG CLASS	3
IMDG PAGE NO.	94 (vol 2)	IMDG PACK GR.	III
EMS	F-E, S-D	UN NO. AIR	1987
AIR CLASS	3	AIR PACK GR.	III

15 REGULATORY INFORMATION

LABELLING



Irritant

RISK PHRASES

R10	Flammable.
R36	Irritating to eyes.
R67	Vapours may cause drowsiness and dizziness.

SAFETY PHRASES

S23	Do not breathe vapour/spray.
S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S46	If swallowed, seek medical advice immediately and show this container or label.
S51	Use only in well-ventilated areas.
S35	This material and its container must be disposed of in a safe way.

EU DIRECTIVES

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.

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations.

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GUIDANCE NOTES

Workplace Exposure Limits EH40.

NATIONAL REGULATIONS

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.

16 OTHER INFORMATION

GENERAL INFORMATION

This product has been manufactured under ISO 9001 and ISO 14001 Quality and Environmental Management Systems.

Only trained personnel should use this material.

REVISION DATE 30/11/2010

REV. NO./REPL. SDS GENERATED 3

RISK PHRASES IN FULL

R22	Harmful if swallowed.
R11	Highly flammable.
R36	Irritating to eyes.
R67	Vapours may cause drowsiness and dizziness.

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.