



SAFETY DATA SHEET (Aerosol) De-Icer

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

PRODUCT NAME	(Aerosol) De-Icer
PRODUCT NO.	A39
APPLICATION	De-icer
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2 HAZARDS IDENTIFICATION

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

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

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification (67/548)
BUTANE	203-448-7	106-97-8	10-30%	F+;R12
ETHANEDIOL	203-473-3	107-21-1	10-30%	Xn;R22
PROPAN-2-OL	200-661-7	67-63-0	10-30%	F;R11 Xi;R36 R67
PROPANE	200-827-9	74-98-6	5-10%	F+;R12

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! Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.

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.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

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

SPECIAL FIRE FIGHTING PROCEDURES

Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapours. Be aware of danger of explosion.

(Aerosol) De-Icer**UNUSUAL FIRE & EXPLOSION HAZARDS**

Aerosol cans may explode in a fire. HIGHLY FLAMMABLE!

SPECIFIC HAZARDS

Aerosol containers can explode when heated, due to excessive pressure build-up. Fire creates: Carbon dioxide (CO₂). Carbon monoxide (CO). Nitrous gases (NO_x).

6 ACCIDENTAL RELEASE MEASURES**PERSONAL PRECAUTIONS**

For personal protection, see section 8.

ENVIRONMENTAL PRECAUTIONS

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

SPILL CLEAN UP METHODS

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

7 HANDLING AND STORAGE**USAGE PRECAUTIONS**

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. Read and follow manufacturer's recommendations. During application and drying, solvent vapours will be emitted. Eliminate all sources of ignition.

STORAGE PRECAUTIONS

Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C. Keep away from heat, sparks and open flame.
Pressurised container: Must not be exposed to temperatures above 50°C. Store in tightly closed original container in a dry and cool place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	TWA - 8 hrs		STEL - 15 min		Notes
BUTANE	WEL	600 ppm	1450 mg/m ³	750 ppm	1810 mg/m ³	
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	
PROPANE		Asphyxiating Asphyxiating	Asphyxiating	Asphyxiating Asphyxiating	Asphyxiating	

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

PROTECTIVE EQUIPMENT**PROCESS CONDITIONS**

Provide eyewash station.

ENGINEERING MEASURES

Observe occupational exposure limits and minimize the risk of inhalation of vapours. No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

RESPIRATORY EQUIPMENT

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

HAND PROTECTION

Use protective gloves made of: Polyvinyl chloride (PVC). 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

Wear appropriate clothing to prevent repeated or prolonged skin contact.

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HYGIENE MEASURES

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

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Aerosol Clear liquid
COLOUR	Blue
ODOUR	Odour of alcohol
VOLATILE ORGANIC COMPOUND (VOC)	415 g/litre

10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions and recommended use. Avoid: Heat, sparks, flames. Shocks and physical damage.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition. Avoid contact with: Strong oxidising agents. Strong alkalis. Strong mineral acids.

HAZARDOUS POLYMERISATION

Will not polymerise.

MATERIALS TO AVOID

Strong alkalis. Strong oxidising substances.

HAZARDOUS DECOMPOSITION PRODUCTS

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

11 TOXICOLOGICAL INFORMATION

GENERAL INFORMATION

This product has low toxicity. Only large volumes may have adverse impact on human health.

INHALATION

Vapour may irritate respiratory system or lungs.

INGESTION

May cause discomfort if swallowed.

SKIN CONTACT

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

EYE CONTACT

Spray and vapour in the eyes may cause irritation and smarting.

HEALTH WARNINGS

Because of quantity and composition, the health hazard is small.

MEDICAL SYMPTOMS

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

12 ECOLOGICAL INFORMATION

ECOTOXICITY

No negative effects on the aquatic environment are known. 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.

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.

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

Do not puncture or incinerate even when empty. Empty aerosols should be recycled where facilities exist. Full or part full aerosols should be disposed of as hazardous waste in accordance with local authority requirements.

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DISPOSAL METHODS

Empty containers must not be burned because of explosion hazard. Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle, if practical.

14 TRANSPORT INFORMATION

UK ROAD CLASS	2		
PROPER SHIPPING NAME	AEROSOLS		
UN NO. ROAD	1950	UK ROAD PACK GR.	N/A
ADR CLASS NO.	2	ADR CLASS	Class 2: Gases
ADR PACK GROUP	N/A	TUNNEL RESTRICTION CODE	(D)
ADR LABEL NO.	2.1	CEFIC TEC(R) NO.	20G5F
RID CLASS NO.	2	RID PACK GROUP	N/A
UN NO. SEA	1950	IMDG CLASS	2.1
IMDG PAGE NO.	93 (vol 2)	IMDG PACK GR.	N/A
EMS	F-D, S-U	UN NO. AIR	1950
AIR CLASS	2.1	AIR PACK GR.	N/A

15 REGULATORY INFORMATION

LABELLING



Irritant



Extremely Flammable

RISK PHRASES

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

SAFETY PHRASES

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.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
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.

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

(Aerosol) De-Icer

GENERAL INFORMATION

Only trained personnel should use this material. This product has been manufactured under ISO 9001 and ISO 14001 Quality and Environmental Management Systems.

REVISION DATE 10/11/2010

REV. NO./REPL. SDS GENERATED 1

SDS NO. 4

RISK PHRASES IN FULL

R12	Extremely flammable.
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.