Report Date: 25/07/2009 1 / 5

SDS NO.: 16007

SAFETY DATA SHEET BLUE STAR DE-ICER AEROSOL

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

PRODUCT NAME BLUE STAR DE-ICER AEROSOL

PRODUCT NO. EDI300, SDI600, SDI300, SDI411, JDI300, JDI600, NDI411, SPW600, MDV600, NDI501, EDI301,

EDI600, EDI601, HOT042, NDI311, NDI004, NDI601, SDI311

INTERNAL ID (

APPLICATION Antifreeze liquid
SUPPLIER PAKEX UK PLC
1 PRIME POINT

WELWYN GARDEN CITY HERTFORDSHIRE

AL7 1FE 01707 384858 01707 332838

SALES@PAKEXUK.COM

2 HAZARDS IDENTIFICATION

Extremely flammable.

CLASSIFICATION F+;R12.

HUMAN HEALTH

See section 11 for additional information on health hazards.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
AMMONIA%	215-647-6	1336-21-6	<1%	C;R34 N;R50
BUTANE/PROPANE BLEND	270-704-2	68476-85-7	1-5%	F+;R12.
ETHANEDIOL	203-473-3	107-21-1	5-10%	Xn;R22
ETHANOL	200-578-6	64-17-5	10-30%	F;R11
IPA	200-661-7	67-63-0	1-5%	F;R11 Xi;R36 R67
METHANOL	200-659-6	67-56-1	1-5%	F;R11 T;R23/24/25,R39/23/24/25

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

4 FIRST-AID MEASURES

GENERAL INFORMATION

Remove affected person from source of contamination. Get medical attention immediately!

INHALATION

Move injured person into fresh air immediately. Call an ambulance. Be aware that symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Bring these instructions. Place unconscious person on the side in the recovery position and ensure breathing can take place.

INGESTION

Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and take these instructions.

SKIN CONTACT

Remove contaminated clothing immediately and wash skin with soap and water. Consult a physician for specific advice.

Report Date: 25/07/2009 2 / 9

BLUE STAR DE-ICER AEROSOL

SDS NO.:

16007

EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Immediately transport to hospital or eye specialist.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use fire-extinguishing media appropriate for surrounding materials.

SPECIAL FIRE FIGHTING PROCEDURES

Be aware of danger of explosion.

SPECIFIC HAZARDS

By heating and fire, toxic vapours/gases may be formed.

PROTECTIVE MEASURES IN FIRE

Leave danger zone immediately.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. In case of spills, beware of slippery floors and surfaces.

ENVIRONMENTAL PRECAUTIONS

The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

SPILL CLEAN UP METHODS

For waste disposal, see section 13. When dealing with a spillage, please consult the section relating to suitable protective measures. Absorb spillage with non-combustible, absorbent material. Ventilate well. Prevent discharge of larger quantity to drain.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Read and follow manufacturer's recommendations. Always remove grease with soap and water or skin cleaning agent, never use organic solvents. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product.

STORAGE PRECAUTIONS

Keep away from heat, sparks and open flame. 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
AMMONIA%	WEL		18 mg/m3		25 mg/m3	
BUTANE/PROPANE BLEND	WEL	1000 ppm	1750 mg/m3	1250 ppm	2180 mg/m3	
ETHANEDIOL	WEL		10 mg/m3(Sk)		104 mg/m3(Sk)	
ETHANOL	WEL	1000 ppm	1920 mg/m3			
IPA	WEL	400 ppm	999 mg/m3	500 ppm	1250 mg/m3	
METHANOL	WEL	200 ppm(Sk)	266 mg/m3(Sk)	250 ppm(Sk)	333 mg/m3(Sk)	

WEL = Workplace Exposure Limit.

PROTECTIVE EQUIPMENT







Report Date: 25/07/2009 3 / 9

SDS NO.:

16007

BLUE STAR DE-ICER AEROSOL

PROCESS CONDITIONS

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

ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit is not exceeded.

RESPIRATORY EQUIPMENT

In case of inadequate ventilation use suitable respirator.

HAND PROTECTION

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 splash-proof eye goggles to prevent any possibility of eye contact.

OTHER PROTECTION

Provide eyewash station.

HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash at the end of each work shift and before eating, smoking and using the toilet.

SKIN PROTECTION

Protection suit must be worn.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Aerosol

10 STABILITY AND REACTIVITY

STABILITY

No particular stability concerns.

11 TOXICOLOGICAL INFORMATION

HEALTH WARNINGS

This chemical can be hazardous when inhaled and/or touched. Vapour from this chemical can be hazardous when inhaled.

ROUTE OF ENTRY

Inhalation. Ingestion. Skin and/or eye contact. Skin absorption.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Dangerous for the environment if discharged into watercourses.

13 DISPOSAL CONSIDERATIONS

GENERAL INFORMATION

When handling waste, consideration should be made to the safety precautions applying to handling of the product. Only experts should be permitted to carry out disposal of this material.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements. Absorb spillage with non-combustible, absorbent material.

14 TRANSPORT INFORMATION

GENERAL

Full protective clothing should be worn when handling this product.

Report Date: 25/07/2009 4 / 5

> SDS NO.: 16007

BLUE STAR DE-ICER AEROSOL



UK ROAD CLASS 2.1

PROPER SHIPPING NAME **AEROSOLS**

UN NO. ROAD 1950 UK ROAD PACK GR.

ADR CLASS NO. ADR CLASS Class 2: Gases 2.1

ADR PACK GROUP ADR LABEL NO. 2.1 RID CLASS NO. CEFIC TEC(R) NO. 20G5F 2.1 RID PACK GROUP # UN NO. SEA 1950 IMDG CLASS 2.1 IMDG PACK GR.

EMS F-D. S-U **MFAG** See Guide MARINE POLLUTANT UN NO. AIR 1950 No. AIR CLASS AIR PACK GR.

15 REGULATORY INFORMATION

LABELLING



Extremely Flammable

RISK	PHR	ASES
111011		

RISK PHRASES		
	R12	Extremely flammable.
SAFETY PHRASES		
	A1	Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
	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.
	S51	Use only in well-ventilated areas.
	S56	Dispose of this material and its container to hazardous or special waste collection point.
	S46	If swallowed, seek medical advice immediately and show this container or label.
	S23	Do not breathe vapour/spray.

DETERGENT LABELLING

< 5% Aliphatic hydrocarbons

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. System of specific information relating to Dangerous Preparations. 2001/58/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.

16 OTHER INFORMATION

REVISION COMMENTS

NOTE: Lines within the margin indicate significant changes from the previous revision.

Report Date: 25/07/2009 5 / 5

BLUE STAR DE-ICER AEROSOL

SDS NO.: 16007

ISSUED BY HS&E Manager.

REVISION DATE 16/06/2008

REV. NO./REPL. SDS GENERATED 22

RISK PHRASES IN FULL

R11 Highly flammable.
R12 Extremely flammable.
R22 Harmful if swallowed.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R34 Causes burns.
R36 Irritating to eyes.

R37 Irritating to respiratory system.

R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

R50 Very toxic to aquatic organisms.

R67 Vapours may cause drowsiness and dizziness.

DISCLAIMER

The information provided in this document has been compiled on the basis of our current knowledge and is believed to be in accordance with the requirements of the Dangerous Substances Directive, Dangerous Preparations Directive and Safety Data Sheets Directive. The information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any particular conditions or process. The conditions and extent of storage and use of material are outside of our control and within the control of the possessor or user. Consequently it is the responsibility of the possessor or user to satisfy themselves as to the completeness of such information and the suitability of the material for their own particular circumstances, conditions or use.