SAFETY DATA SHEET

Issued: 08/02/2019; Revision No.1
Regulation (EU) No. 453/2010

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifier

Material name : De-Icer

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

Product use : Aerosol de-icing fluid

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: The Jason Group Ltd.,
Unit G Sheriff House
Nantwich Road
Middlewich
Cheshire
CW10 0LH

Tel. : 01606 836897
Fax. : 01606 841610

Email (for SDSs) : info@thejasongroup.com

1.4 Emergency tel. no.: 01606 836897 (Office hours)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to 1272/2008/EC: Classification, Labelling and Packaging of Substances and Mixtures (CLP) Regulation:

Physical and Chemical Hazards	Flam.Aerosol 1; H222; H229
Human health	Eye Irrit.2; H319; STOT SE3, H336
Environment	Not classified

2.2 Label elements

Labelling according to EC Directives: 1272/2008/EC

Signal word: Danger **Contains:** Propan-2-ol

Pictogram(s):



Hazard Statements:	H222	Extremely flammable aerosol.
	H229	Pressurised container: May burst if heated.
	H319	Causes serious eye irritation.
	H336	May cause drowsiness or dizziness
Precautionary Statements:	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P211	Do not spray on an open flame or other ignition source.
	P251	Do not pierce or burn, even after use.
	P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C.
	P280	Wear protective gloves/eye/face protection.

Precautionary Statements (continued):

P305+P351+P338	IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists, get medical advice/attention.
P261	Avoid breathing vapour/spray.
P271	Use only outdoors or in a well-ventilated area.

2.3 Other hazards In use, may form flammable / explosive vapour-air mixture.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures:

Hazardous components

Chemical Name	CAS No./ EC No./ Reg. No	Classification (1272/2008/EC)	Content
PROPAN-2-OL	67-63-0 200-661-7 01-2119457558-25-xxxx	Flam. Liq.2; H225 Eye Irrit.2; H319 STOT SE3; H336	60-70%
LIQUEFIED PETROLEUM GAS (contains <0.1% 1,3-butadiene)	68476-85-7 270-704-2 -	Flam.Gas 1; H220 Gas under pressure; H280	10-30%

See Section 16 for the full text of the H-statements noted above.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Remove casualty from exposure ensuring one's own safety whilst doing so. Take off any contaminated clothing and shoes/boots immediately. Never give anything by mouth to an unconscious person.

Skin contact: Wash with soap and water. Seek medical advice if irritation develops.

Eye contact: Rinse with water for 10 minutes and seek medical advice if irritation persists.

Ingestion: Rinse mouth with water and give water to drink. Do not induce vomiting. Seek medical advice.

Inhalation: Remove to fresh air. Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed: May cause irritation to eyes. May cause drowsiness or dizziness.

4.3 Indication of any immediate medical attention and special treatment needed: See Eye contact and Inhalation above.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Carbon dioxide; dry chemical powder; alcohol or polymer foam.
Unsuitable extinguishing media: High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: Irritating/toxic fumes may be released at elevated temperatures.

5.3 Advice for fire-fighters:

Special protective equipment:	Wear self-contained breathing apparatus. Use personal protective equipment.
Further information:	Standard procedure for chemical fires. Use water spray to cool containers. Do not allow fire run-off to enter drains.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Use personal protective equipment to deal with spillage.

6.2 Environmental precautions

Contain the spillage using sufficient appropriate absorbent material. Do not discharge into drains or rivers, but if contamination to waterways has occurred, inform local authorities.

6.3 Methods and materials for containment and cleaning up

Wipe up liquid spillage with absorbent material such as sand, earth, or vermiculite, and place in a labelled container for disposal in accordance with local/national regulations.

6.4 References to other sections: See sections 8 and 13 for personal protection and disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not breathe spray mist. Avoid contact with eyes. Handle with care.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, well ventilated area, below 50°C. Protect from frost, heat and sunlight. Keep away from food, drink and animal feed.

7.3 Specific end use(s): No information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Chemical name	8hr TWA	15min STEL	Reference
Propan-2-ol	999 mg/m^3/400 ppm	1250 mg/m^3/500 ppm	EH40/2005
Liquefied petroleum gas	1750 mg/m^3/1000ppm	2810 mg/m^3/1250 ppm	EH40/2005

DNEL (workers)	Propan-2-ol	Reference
Chronic systemic effects (dermal)	888 mg/kg bw/day	Manufacturer
Chronic systemic effects (inhalation)	500 mg/m^3	Manufacturer

DNEL (consumers)	Propan-2-ol	Reference
Chronic systemic effects (dermal)	319 mg/kg/day	Manufacturer
Chronic local effects (inhalation)	89 mg/m^3	Manufacturer

PNEC: No information available.

8.2 Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Personal protective equipment

Respiratory protection: Unlikely to be necessary in normal circumstances.

Hand protection: General purpose rubber gloves. Check with glove manufacturer for specific advice.

Eye protection: Chemical splash goggles if eye contact is reasonably probable. The selected goggles or glasses must satisfy the European standard EN 166.

Skin and body protection: General workwear.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practices. Do not eat or drink whilst using the product. Wash hands before breaks and at the end of the work day. Wash contaminated clothing before re-use.

Environmental exposure controls: Do not discharge into drains or rivers.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

State and colour	Aerosol emitting colourless spray.
Odour	Alcoholic
Odour Threshold	No data available
Flammability	Extremely flammable
Flash point	<0°C
Lower explosion limit	0.8%
Upper explosion limit	12.0%
Explosive properties	Not explosive
Thermal decomposition	No data available
Auto-ignition temperature	>230°C
Oxidising properties	Non-oxidising
Solubility in water	Soluble
Solubility in other solvents	Alcohols.
pH	No data available
Melting point/range	No data available
Boiling point/range	No data available
Relative density	No data available
Vapour pressure	No data available
Vapour density	No data available
Partition coefficient: n-octanol/water	No data available
Viscosity (kinematic)	No data available
Evaporation rate	No data available

9.2 Other information No information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity	Generally non-reactive.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	None if stored and used as directed.
10.4 Conditions to avoid	None known.
10.5 Incompatible materials	Strong acids. Strong alkalis. Oxidising agents.
10.6 Hazardous decomposition products	Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity

Chemical name	Oral (LD50)	Inhalation (LC50)	Dermal (LD50)
Propan-2-ol	>2000 mg/kg (Rat)	No data available	>2000 mg/kg (Rabbit)
Liquefied petroleum gas	Not applicable	>20mg/l (Rat) 4h	Not applicable

Skin corrosion/irritation: May be irritating with prolonged exposure.
Serious eye damage/eye irritation: May be irritating.
Respiratory or skin sensitisation: Not expected to be a sensitiser.
Repeated dose toxicity: Repeated skin contact may cause defatting leading to dermatitis.
Carcinogenicity: Not expected to be carcinogenic.
Mutagenicity: Not expected to be mutagenic.
Toxicity for reproduction: Not expected to be a hazard.
Specific target organ toxicity (STOT): No data available.

Further information

The product as a whole may cause irritation of skin, eyes, nose and upper respiratory tract if exposed to high levels of spray mist. May cause drowsiness or dizziness.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Chemical name	Species	Test	Value
Propan-2-ol	Daphnia	EC50 48h	>100 mg/l
	Golden ide	LC50 48h	>100 mg/l
	Algae	EC50 72h	>100 mg/l

12.2 Persistence and degradability Expected to be readily biodegradable.

12.3 Bioaccumulative potential Low bioaccumulation potential.

12.4 Mobility in soil Soluble in water.

12.5 Results of PBT and vPvB assessment Contains no PBT or vPvB substances.

12.6 Other adverse effects None expected.

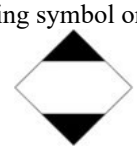
13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal operations: Dispose of in accordance with local and national regulations.
Contact licensed waste disposal company. Most aerosols can be recycled.
Do not pierce or burn or use a cutting torch on the empty aerosol container.

14. TRANSPORT INFORMATION

General Information: The UN number for all aerosols is 1950. Aerosols packed in fibreboard cartons up to 30 kg gross weight, or shrink/stretch wrapped onto trays up to 20 kg gross weight may be transported as Limited Quantities, and should display the following symbol on the pack:



The following information relates to all other aerosols not transported as Limited Quantities:

14.1 UN number	ADR/RID/ADN; IMDG; ICAO	1950
14.2 UN proper shipping name	AEROSOLS	
14.3 Transport hazard class(es)	ADR/RID/ADN Class	2, 5F
	ADR/RID/ADN Class	Class 2, Gases
	ADR Label No.	2.1
	IMDG Class	2
	ICAO Class/Division	2
	ICAO Subsidiary risk	2.1
	Transport labels	
14.4 Packing Group	ADR/RID/ADN; IMDG; ICAO	Not applicable for aerosols
14.5 Environment hazards	Marine Pollutant	Not applicable for aerosols.
14.6 Special precautions for user	EMS	F-D, S-U
	Tunnel restriction code	(D)

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for aerosols.

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 2001 No.2677) with amendments.

EU Directives
Regulations (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.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture (continued)

Statutory Instruments
The Chemicals (Hazard information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Guidance Notes
Health and Safety Executive Workplace Exposure Limits EH40.

15.2 Chemical Safety Assessment
Chemical Safety Assessments/Reports (CSA/CSR) are not required for mixtures.

16. OTHER INFORMATION

This safety data sheet is prepared in accordance with Regulation (EC) No 1907/2006 (REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals) as amended, and Regulation EU 453/2010.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008 (CLP):

Physical hazards:	On basis of test data/Expert judgement.
Health hazards:	Calculation method
Environmental hazards:	Calculation method

Full text of H-statements referred to under sections 2 and 3

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
H280 Contains gas under pressure; may explode if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Abbreviations and acronyms

CAS: Chemical Abstract Service (division of the American Chemical Society). {Section 3}.
STOT: Single Target Organ Toxicity (Section 2; 11).
SE: Single exposure (Section 2)
TWA: Time-weighted average. (Section 8).
STEL: Short-term exposure limit. (Section 8).
DNEL: Derived no effect level – a level above which humans should not be exposed. (Section 8).
PNEC: Predicted No Effect Concentration (Section 8).
PBT: Persistent, Bioaccumulative, Toxic. (Section 12).
vPvB: very Persistent and very Bioaccumulative. (Section 12).

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

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