SAFETY DATA SHEET
-20°C low methanol Aero Deicer

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name -20°C low methanol Aero Deicer

Product number DI6

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

Identified uses Deicer

1.3. Details of the supplier of the safety data sheet

Supplier
A Holts Car Care Product
Holt Lloyd International Ltd
Barton Dock Road
Stretford
Manchester
M32 0YQ - England, UK
+44 (0) 161 866 4800
FAX +44 (0) 161 866 4854
www.holtsauto.com

Contact person Contact Email address: info@holtsauto.com

1.4. Emergency telephone number

Emergency telephone UK - 00 44 (0) 161 866 4800 Office hrs = 0900 - 1700 hrs

National emergency telephone number https://poisoncentres.echa.europa.eu/

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Aerosol 1 - H222, H229

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

Hazard pictograms

Signal word Danger

Hazard statements
H222 Extremely flammable aerosol.
H229 Pressurised container: may burst if heated.

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Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
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/122°F.
P501 Dispose of contents/ container in accordance with local regulations.

2.3. Other hazards

The product does not contain any substance that is classified as PBT or vPvB

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ETHANOL **10-30%**

CAS number: 64-17-5 EC number: 200-578-6

Classification
Flam. Liq. 2 - H225

ETHANEDIOL **5-10%**

CAS number: 107-21-1 EC number: 203-473-3 REACH registration number: 01-2119456816-28-XXXX

Classification
Acute Tox. 4 - H302

BUTANE **1-5%**

CAS number: 106-97-8 EC number: 203-448-7

Classification
Flam. Gas 1 - H220
Press. Gas

ISOBUTANE **1-5%**

CAS number: 75-28-5 EC number: 200-857-2

Classification
Flam. Gas 1 - H220
Press. Gas

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AMMONIA ...%	**<1%**
CAS number: 1336-21-6	EC number: 215-647-6
M factor (Acute) = 1	

Classification
Skin Corr. 1B - H314
Eye Dam. 1 - H318
STOT SE 3 - H335
Aquatic Acute 1 - H400

METHANOL	**<0.6%**
CAS number: 67-56-1	EC number: 200-659-6

Classification
Flam. Liq. 2 - H225
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 3 - H331
STOT SE 1 - H370

PROPAN-2-OL	**<1%**
CAS number: 67-63-0	EC number: 200-661-7

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

MORPHOLINE	**<1%**
CAS number: 110-91-8	EC number: 203-815-1

Classification
Flam. Liq. 3 - H226
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Corr. 1B - H314
Eye Dam. 1 - H318

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation Keep affected person away from heat, sparks and flames. Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person warm and at rest. Get medical attention immediately.

Ingestion Not relevant.

Skin contact Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

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Eye contact If liquid has entered the eyes, proceed as follows. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. 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

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Get medical attention promptly if symptoms occur after washing.

Inhalation Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion Due to the physical nature of this material it is unlikely that swallowing will occur.

Skin contact Prolonged skin contact may cause redness and irritation.

Eye contact May cause temporary eye irritation.

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

Notes for the doctor Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Powder. Dry chemicals, sand, dolomite etc. Water spray, fog or mist.

5.2. Special hazards arising from the substance or mixture

Specific hazards Risk of explosion if heated. Containers can burst violently or explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters

Protective actions during firefighting 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

Personal precautions For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions Not considered to be a significant hazard due to the small quantities used.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level.

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7.2. Conditions for safe storage, including any incompatibilities

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

Storage class Flammable compressed gas storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³
Short-term exposure limit (15-minute): WEL

ETHANEDIOL

Long-term exposure limit (8-hour TWA): WEL 20 ppm 52 mg/m³ vapour
Short-term exposure limit (15-minute): WEL 40 ppm 104 mg/m³ vapour
Sk
Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate
Sk

BUTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m³
Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m³

ISOBUTANE

Long-term exposure limit (8-hour TWA): OES 800 ppm
Short-term exposure limit (15-minute): OES 800 ppm

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³
Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³
Sk

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³
Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

MORPHOLINE

Long-term exposure limit (8-hour TWA): WEL 20 ppm(Sk) 72 mg/m3(Sk)
Short-term exposure limit (15-minute): WEL 30 ppm(Sk) 109 mg/m3(Sk)
WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

ETHANEDIOL (CAS: 107-21-1)

Ingredient comments WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment

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Appropriate engineering controls	Provide adequate general and local exhaust ventilation.
Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Rubber (natural, latex). EN374
Other skin and body protection	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
Hygiene measures	Use engineering controls to reduce air contamination to permissible exposure level. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.
Respiratory protection	No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Colourless.
Odour	Slight.
pH	pH (concentrated solution): 9.5
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 4.8 Upper flammable/explosive limit: 9.5
Relative density	0.995 @ °C
Solubility(ies)	Miscible with water.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not applicable.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Strong oxidising agents. Strong alkalis. Strong mineral acids.

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

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10.6. Hazardous decomposition products

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

Acute toxicity - oral

ATE oral (mg/kg) 6,720.43

Acute toxicity - dermal

ATE dermal (mg/kg) 54,674.69

Acute toxicity - inhalation

ATE inhalation (gases ppm) 127,574.27

ATE inhalation (vapours mg/l) 546.75

ATE inhalation (dusts/mists mg/l) 91.12

Inhalation Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous vapour concentrations. May cause eye and respiratory system irritation. Symptoms following overexposure may include the following: Headache. Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion No harmful effects expected from quantities likely to be ingested by accident.

Skin contact Prolonged and frequent contact may cause redness and irritation.

Eye contact Vapour or spray in the eyes may cause irritation and smarting.

SECTION 12: Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment. The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces. The product is insoluble in water. The product hardens to a solid, immobile substance.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not known.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

UN No. (ADN) 1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS

Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class 2.1

ADR/RID classification code 5F

ADR/RID label 2.1

IMDG class 2.1

ICAO class/division 2.1

ADN class 2.1

Transport labels

14.4. Packing group

ADR/RID packing group None

IMDG packing group None

ICAO packing group None

ADN packing group None

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS F-D, S-U

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ADR transport category	2
Tunnel restriction code	(D)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

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

SECTION 15: Regulatory information

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

National regulations	EH40/2005 Workplace exposure limits.
EU legislation	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 (as amended). 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) (as amended).
Authorisations (Annex XIV Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Annex XVII Regulation 1907/2006)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date	23/05/2019
Revision	3
Supersedes date	11/09/2018
SDS number	21378
Hazard statements in full	H220 Extremely flammable gas. H222 Extremely flammable aerosol. H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H229 Pressurised container: may burst if heated. H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H370 Causes damage to organs . H400 Very toxic to aquatic life.

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