

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.09.2017

Version number 1

Revision: 20.09.2017

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

- **1.1 Product identifier**
- **Trade name:** De Icer
- **Article number:** 871125202249_02
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** SU21 Consumer uses: Private households / general public / consumers
- **Product category** PC4 Anti-Freeze and de-icing products
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
EDCO Eindhoven B.V.
Adriaan Mulderweg 9/11
5657 EM Eindhoven
The Netherlands
gard.moors@edco.nl
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:** During normal opening times: +31 40 250 11 11

SECTION 2: Section 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02

- **Signal word** Danger
- **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
- **Precautionary statements**
 - P101 If medical advice is needed, have product container or label at hand.
 - P102 Keep out of reach of children.
 - P103 Read label before use.
 - 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.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

EU

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.09.2017

Version number 1

Revision: 20.09.2017

Trade name: De Icer

(Contd. of page 1)

SECTION 3: Section 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 107-21-1 EINECS: 203-473-3 Index number: 603-027-00-1	ethanediol	⚠ Acute Tox. 4, H302	18.0%
CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5	ethanol	⚠ Flam. Liq. 2, H225	16.0%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0	butane	⚠ Flam. Gas 1, H220; Press. Gas C, H280	6.0%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5	propane	⚠ Flam. Gas 1, H220; Press. Gas C, H280	6.0%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: Section 4: First aid measures

· 4.1 Description of first aid measures

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:** Rinse opened eye for several minutes under running water.

· **After swallowing:** If symptoms persist consult doctor.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Section 5: Firefighting measures

· 5.1 Extinguishing media

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **5.2 Special hazards arising from the substance or mixture** No further relevant information available.

· 5.3 Advice for firefighters

· **Protective equipment:** No special measures required.

SECTION 6: Section 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Section 7: Handling and storage

· **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.09.2017

Version number 1

Revision: 20.09.2017

Trade name: De Icer

(Contd. of page 2)

- **Information about fire - and explosion protection:**
 Keep ignition sources away - Do not smoke.
 Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
 Do not spray onto a naked flame or any incandescent material.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Section 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

• 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

107-21-1 ethanediol

IOELV	Short-term value: 104 mg/m ³ , 40 ppm
	Long-term value: 52 mg/m ³ , 20 ppm
	Skin

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Protection of hands:**
 The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Not required.

SECTION 9: Section 9: Physical and chemical properties

• 9.1 Information on basic physical and chemical properties

• General Information

• Appearance:

Form:	Fluid
Colour:	Not determined.
Odour:	Characteristic
Odour threshold:	Not determined.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.09.2017

Version number 1

Revision: 20.09.2017

Trade name: De Icer

(Contd. of page 3)

· pH-value:	Not determined.
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	78°C
· Flash point:	-97°C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	365°C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	3.2 Vol %
Upper:	53 Vol %
· Vapour pressure at 20°C:	59 hPa
· Density at 20°C:	0.86648 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	28.0 %
Water:	54.0 %
VOC (EC)	28.00 %
Solids content:	0.0 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Section 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Section 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.09.2017

Version number 1

Revision: 20.09.2017

Trade name: De Icer

(Contd. of page 4)

· LD/LC50 values relevant for classification:**107-21-1 ethanediol**

Oral	LD50	5,840 mg/kg (rat)
Dermal	LD50	9,530 mg/kg (rabbit)

64-17-5 ethanol

Oral	LD50	7,060 mg/kg (rat)
Inhalative	LC50/4 h	20,000 mg/l (rat)

106-97-8 butane

Inhalative	LC50/4 h	658 mg/l (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Section 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Section 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Section 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1950

(Contd. on page 6)

Safety data sheet

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Trade name: De Icer

(Contd. of page 5)

· **14.2 UN proper shipping name**
 · **ADR** 1950 AEROSOLS
 · **IMDG** AEROSOLS
 · **IATA** AEROSOLS, flammable

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 2 5F Gases.
 · **Label** 2.1

· **IMDG, IATA**



· **Class** 2.1
 · **Label** 2.1

· **14.4 Packing group**

· **ADR, IMDG, IATA** Void

· **14.5 Environmental hazards:** Not applicable.

· **14.6 Special precautions for user** Warning: Gases.

· **Danger code (Kemler):** -

· **EMS Number:** F-D,S-U

· **Stowage Code**

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre:

Category A. For AEROSOLS with a capacity above 1 litre:

Category B. For WASTE AEROSOLS: Category C, Clear

of living quarters.

· **Segregation Code**

SG69 For AEROSOLS with a maximum capacity of 1 litre:

Segregation as for class 9. Stow "separated from" class 1

except for division 1.4. For AEROSOLS with a capacity

above 1 litre: Segregation as for the appropriate

subdivision of class 2. For WASTE AEROSOLS:

Segregation as for the appropriate subdivision of class 2.

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E0

Not permitted as Excepted Quantity

· **Transport category**

2

· **Tunnel restriction code**

D

· **IMDG**

· **Limited quantities (LQ)**

1L

· **Excepted quantities (EQ)**

Code: E0

Not permitted as Excepted Quantity

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 20.09.2017

Version number 1

Revision: 20.09.2017

Trade name: De Icer

(Contd. of page 6)

· **UN "Model Regulation":**

UN 1950 AEROSOLS, 2.1

SECTION 15: Section 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category P3a** FLAMMABLE AEROSOLS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Section 17: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases – Category 1

Aerosol 1: Aerosols – Category 1

Press. Gas C: Gases under pressure – Compressed gas

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 4: Acute toxicity – Category 4