



De-Icer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 5-1-2011 Revision date: 2-8-2018 Supersedes: 3-10-2017 version: 5.0

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

1.1. Product identifier

Product form : Mixture
 Product name : De-Icer
 Product code : 89000
 Vaporizer : Container fitted with a sealed spray attachment

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

1.2.1. Relevant identified uses

Intended for general public
 Main use category : Consumer use
 Function or use category : Anti-freezing agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

MPM International Oil Company
 Cyclotronweg 1
 2629 HN Delft - Nederland
 T +31 (0)15 2514030 - F +31 (0)15 2514031
info@mpmoil.nl - www.mpmoil.nl

1.4. Emergency telephone number

Emergency number : +31 (0)15 2514030 (08.00 - 17.00 GMT+1)

Country	Official advisory body	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	Beaumont Hospital Beaumont Road 9 Dublin	: +353 1 8379964	
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 3 : H226
 Specific target organ toxicity — Repeated exposure, Category 2 : H373
 Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS08

CLP Signal word : Warning
 Hazardous ingredients : 1,2-Ethanediol
 Hazard statements (CLP) : H226 - Flammable liquid and vapour.
 H373 - May cause damage to organs through prolonged or repeated exposure.
 Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
 P102 - Keep out of reach of children.

De-Icer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 - Keep container tightly closed.

P260 - Do not breathe dusts or mists.

P314 - Get medical advice/attention if you feel unwell.

P280 - Wear eye protection, protective gloves.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ethanol; ethyl alcohol	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5 (REACH-no) 01-2119457610-43	40 - 48	Flam. Liq. 2, H225 Eye Irrit. 2, H319
1,2-Ethanediol	(CAS-No.) 107-21-1 (EC-No.) 203-473-3 (EC Index-No.) 603-027-00-1 (REACH-no) 01-2119456816-28	7 - 11	Acute Tox. 4 (Oral), H302 STOT RE 2, H373

Specific concentration limits:

Name	Product identifier	Specific concentration limits
ethanol; ethyl alcohol	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5 (REACH-no) 01-2119457610-43	(50 =<C < 100) Eye Irrit. 2, H319

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General	: If medical advice is needed, have product container or label at hand.
After inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
After skin contact	: Take off contaminated clothing. Wash with plenty of water/.... If skin irritation or rash occurs: Get medical advice/attention.
After eye contact	: Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
After ingestion	: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell. Let water be swallowed in little sips (dilution effect).

4.2. Most important symptoms and effects, both acute and delayed

After inhalation	: High concentration of vapours may induce: headache, nausea, dizziness. Coughing.
After skin contact	: May cause skin irritation / dermatitis.
After eye contact	: Eye irritation.
After ingestion	: Abdominal pain.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

No additional information available

5.2. Special hazards arising from the substance or mixture

Fire hazard	: May form flammable/explosive vapour-air mixture.
Explosion hazard	: Vapours may form explosive mixtures with air.

5.3. Advice for firefighters

Other information	: Use water spray/stream to protect personnel and to cool endangered containers.
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De-Icer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Keep away from sources of ignition - No smoking.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent spreading over great surfaces (e.g. by damming or installing oil booms).

6.3. Methods and material for containment and cleaning up

Other information : Ensure adequate ventilation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No additional information available

7.2. Conditions for safe storage, including any incompatibilities

Storage area : Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethanol; ethyl alcohol (64-17-5)		
EU	IOELV TWA (mg/m ³)	260 (NL); 950 (NO); 960 (DE, CH, SK); 1000 (SE, CS, ET, LT, BG, LV, RU); 1900 (DK, FR, FI, GR, AT, HU, SL, HR, PL); 1907 (BE); 1910 (ES); 1920 (GB)
EU	IOELV TWA (ppm)	1000 (FR, GB, PT, BE, ES, DK, FI); 500 (DE, SE, NO, CH)
EU	IOELV STEL (mg/m ³)	1900 (LT, ET, NL, SE); 1920 (CH, SK); 2500 (FI); 3000 (CS); 3800 (AT); 9500 (FR)
EU	IOELV STEL (ppm)	5000 (FR); 1000 (SE, CH); 1300 (FI)
1,2-Ethanediol (107-21-1)		
EU	Local name	Ethylene glycol
EU	IOELV TWA (mg/m ³)	52 mg/m ³
EU	IOELV TWA (ppm)	20 ppm
EU	IOELV STEL (mg/m ³)	104 mg/m ³
EU	IOELV STEL (ppm)	40 ppm
EU	Notes	Skin

8.2. Exposure controls

Technical measures:

If suction of the immediate vicinity is impossible or insufficient, adequate airing of the working place must be ensured.

Personal protective equipment:

Gloves. Safety glasses.

Hand protection:

Wear suitable gloves.

Eye protection:

Safety glasses

Skin and body protection:

None under normal use

Respiratory protection:

De-Icer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

No personal breathing protective equipment is normally required. Not necessary with sufficient ventilation



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Blue.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 23,5 °C
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 955 g/l
Solubility	: Water: 100 %
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 3,5 - 15 vol % (ethyl alcohol)

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

None under normal use.

10.2. Chemical stability

The product is stable at normal handling- and storage conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Keep cool. Protect from sunlight. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

10.5. Incompatible materials

Oxidizing substances.

10.6. Hazardous decomposition products

On burning: release of harmful/irritant gases/vapours e.g.: carbon monoxide - carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

ethanol; ethyl alcohol (64-17-5)

LD50 oral rat	10470 mg/kg
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De-Icer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

ethanol; ethyl alcohol (64-17-5)	
LD50 dermal rat	> 15800 mg/kg
LC50 inhalation rat (mg/l)	30000 mg/m ³ Air
1,2-Ethanediol (107-21-1)	
LD50 oral rat	7712 mg/kg
LD50 dermal rat	> 3500 mg/kg Mouse
LD50 dermal rabbit	10600 mg/kg
LC50 inhalation rat (mg/l)	> 2,5 mg/l/6Hrs
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
1,2-Ethanediol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1000 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	1500 mg/kg bodyweight
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
1,2-Ethanediol (107-21-1)	
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight/day
Aspiration hazard	: Not classified
De-Icer	
Vaporizer	Container fitted with a sealed spray attachment

SECTION 12: Ecological information

12.1. Toxicity

General : No risks worthy of mention.

ethanol; ethyl alcohol (64-17-5)	
LC50 fish 1	11200 mg/l /96h
EC50 Daphnia 1	5012 mg/l /48h Freshwater
ErC50 (algae)	275 mg/l /72h Freshwater
1,2-Ethanediol (107-21-1)	
LC50 fish 1	72860 mg/l 96 hrs / Pimephales promelas
EC50 Daphnia 1	> 100 mg/l 48 hrs
EC50 other aquatic organisms 2	> 9600 mg/l 96 hrs / Selenastrum capricornutum
NOEC (chronic)	15380 mg/l Fish Early Life Stage / Pimephales promelas / 7 days

12.2. Persistence and degradability

1,2-Ethanediol (107-21-1)	
Biodegradation	Readily biodegradable

12.3. Bioaccumulative potential

1,2-Ethanediol (107-21-1)	
Log Pow	-1.36
Bioaccumulative potential	There is no bioaccumulation.

12.4. Mobility in soil

1,2-Ethanediol (107-21-1)	
Soil	This material has low volatility and is water soluble hence the potential for mobility is high.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

De-Icer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830



SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Waste disposal according to official state regulations.

SECTION 14: Transport information

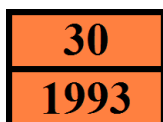
In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG
14.1. UN number	
1993	1993
14.2. UN proper shipping name	
FLAMMABLE LIQUID, N.O.S.	FLAMMABLE LIQUID, N.O.S.
Transport document description	
UN 1993 FLAMMABLE LIQUID, N.O.S. (mixture ethanol and ethylene glycol), 3, III, (D/E)	UN 1993 FLAMMABLE LIQUID, N.O.S. (mixture ethanol and ethylene glycol), 3, III
14.3. Transport hazard class(es)	
3	3
	
14.4. Packing group	
III	III
14.5. Environmental hazards	
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No
No supplementary information available	

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : F1
 Limited quantities (ADR) : 5I
 Transport category (ADR) : 3
 Hazard identification number (Kemler No.) : 30
 Orange plates :



Tunnel restriction code (ADR) : D/E
 EAC code : •3YE

- Transport by sea

EmS-No. (Fire) : F-E
 EmS-No. (Spillage) : S-E

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
 Contains no substance on the REACH candidate list
 Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

De-Icer

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 16: Other information

Indication of changes:

	Revision date	Modified	
	Supersedes	Added	
	SDS EU format	Modified	
3	Composition/information on ingredients	Modified	
9.1	Flash point	Added	
16	Abbreviations and acronyms	Added	

Abbreviations and acronyms:

	ACGIH: American Conference of Governmental Industrial Hygienists. TWA: Time Weighted Average. TLV: Threshold Limit Value. ASTM: American Society for Testing and Materials . ADR: Accord Européen Relatif au Transport International des Marchandises Dangereuses par Route . RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail . ADNR: Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin. IMDG: International Maritime Dangerous Goods. ICAO: International Civil Aviation Organization . IATA: International Air Transport Association. STEL: Short Term Exposure Limit. LD50: median Lethal Dose for 50% of subjects. ATE: acute toxicity estimate. LC50: median Lethal Concentration for 50% of subjects. EC50: concentration producing 50% effect.
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Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

SDS MPM REACH

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product