



# SAFETY DATA SHEET

according to Regulation (EU) 2015/830

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## Michelin De-Icer 600ml

Revision 0  
Revision date 2017-11-07

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

#### 1.1. Product identifier

Product name Michelin De-Icer 600ml

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

Product Use [SU21] Consumer uses: Private households (= general public = consumers);  
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[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen);

#### 1.3. Details of the supplier of the safety data sheet

Company Future Developments Manufacturing Ltd  
Address Davenport Street  
Burslem  
Stoke on Trent  
ST6 4HS  
Staffordshire  
Web www.fdev.co.uk  
Telephone 01782 826870  
Fax 01782 816392  
Email sales@fdev.co.uk  
Email address of the competent person support@fdhost.co.uk

#### 1.4. Emergency telephone number



Emergency telephone number 01782 829000  
9.00am-5.00pm Mon - Fri

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

2.1.1. Classification - 1999/45/EC  
F+; R12  
Symbols: F+: Extremely flammable.  
Main hazards Extremely flammable.  
2.1.2. Classification - EC 1272/2008  
Flam. Liq. 2: H225; Skin Irrit. 2: H315; Eye Irrit. 2: H319;

#### 2.2. Label elements

Hazard pictograms  

Signal Word Danger

Hazard Statement Flam. Liq. 2: H225 - Highly flammable liquid and vapour.  
Skin Irrit. 2: H315 - Causes skin irritation.

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## 2.2. Label elements

<b>Precautionary Statement: Prevention</b>	Eye Irrit. 2: H319 - Causes serious eye irritation.	
	H302 - Harmful if swallowed. P102 - Keep out of reach of children P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/bond container and receiving equipment. P241 - Use explosion-proof electrical/ventilating/lighting// equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P264 - Wash thoroughly after handling. P280 - Wear protective gloves/protective clothing/eye protection/face protection.	
	<b>Precautionary Statement: Response</b>	P302+P352 - IF ON SKIN: Wash with plenty of water/ . P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P321 - Specific treatment (see on this label). P332+P313 - If skin irritation occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P370+P378 - In case of fire: Use to extinguish.
	<b>Precautionary Statement: Storage</b>	P403+P235 - Store in a well-ventilated place. Keep cool.
<b>Precautionary Statement: Disposal</b>	P501 - Dispose of contents/container to local and national regulations	

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### 67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
Ethanol	603-002-00-5	64-17-5	200-578-6		20 - 30%	F; R11	
Mono ethylene glycol	603-027-00-1	107-21-1	203-473-3		10 - 20%	Xn; R22	
n-butane, Isobutane, Propane mixture		68476-85-7	270-704-2		10 - 20%		
Ammonia solution	007-001-01-2	1336-21-6	215-647-6		0.5 - 1%	C; R34 N; R50	
Methanol	603-001-00-X	67-56-1	200-659-6		0 - 0.5%	F; R11 T; R23/24/25-39/23/24/25	

#### EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification	M-factor.
Ethanol	603-002-00-5	64-17-5	200-578-6		20 - 30%	Flam. Liq. 2: H225;	
Mono ethylene glycol	603-027-00-1	107-21-1	203-473-3		10 - 20%	Acute Tox. 4: H302;	
n-butane, Isobutane, Propane mixture		68476-85-7	270-704-2		10 - 20%	Flam. Gas 1: H220; Liquefied gas: H280;	
Ammonia solution	007-001-01-2	1336-21-6	215-647-6		0.5 - 1%	Skin Corr. 1B: H314; Aquatic Acute 1: H400;	
Methanol	603-001-00-X	67-56-1	200-659-6		0 - 0.5%	Flam. Liq. 2: H225; Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; STOT SE 1: H370;	

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>Inhalation</b>	Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system.
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## 4.1. Description of first aid measures

Eye contact	Move the exposed person to fresh air. Seek medical attention. May cause irritation to eyes. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
Skin contact	May cause irritation to skin. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Ingestion	Ingestion may cause nausea and vomiting. Seek medical attention if irritation or symptoms persist.

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

Inhalation	See section 4.1 for further information.
Eye contact	See section 4.1 for further information.
Skin contact	See section 4.1 for further information.
Ingestion	See section 4.1 for further information.

## General information

	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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### 5.2. Special hazards arising from the substance or mixture

	Burning produces irritating, toxic and obnoxious fumes. Vapour may travel considerable distance to source of ignition and flash back.
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### 5.3. Advice for firefighters

	Wear suitable respiratory equipment when necessary.
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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

	Ensure adequate ventilation of the working area. Evacuate personnel to a safe area. Eliminate all sources of ignition. Wear suitable protective equipment.
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### 6.2. Environmental precautions

	Do not allow product to enter drains. Prevent further spillage if safe.
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### 6.3. Methods and material for containment and cleaning up

	Absorb with inert, absorbent material. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.
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### 6.4. Reference to other sections

	See section 2,3,8,13 for further information.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Use explosion proof equipment. Keep away from sources of ignition - No smoking.
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### 7.2. Conditions for safe storage, including any incompatibilities

	Keep in a cool, dry, well ventilated area. Store in correctly labelled containers. Keep at temperature not exceeding 50°C.
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### 7.3. Specific end use(s)

	See section 1.2 for further information. Not to be used inside vehicles.
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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

See section 8.2 for further information.

#### 8.1.1. Exposure Limit Values

Ethanol	WEL 8-hr limit ppm: 1000 WEL 15 min limit ppm: - WEL 8-hr limit mg/m3 total inhalable dust: - WEL 8-hr limit mg/m3 total respirable dust: -	WEL 8-hr limit mg/m3: 1920 WEL 15 min limit mg/m3: - WEL 15 min limit mg/m3 total inhalable dust: - WEL 15 min limit mg/m3 total respirable dust: -
Methanol	WEL 8-hr limit ppm: 200 WEL 15 min limit ppm: 250 WEL 8-hr limit mg/m3 total inhalable dust: - WEL 8-hr limit mg/m3 total respirable dust: -	WEL 8-hr limit mg/m3: 266 WEL 15 min limit mg/m3: 333 WEL 15 min limit mg/m3 total inhalable dust: - WEL 15 min limit mg/m3 total respirable dust: -
Mono ethylene glycol	WEL 8-hr limit ppm: - WEL 15 min limit ppm: - WEL 8-hr limit mg/m3 total inhalable dust: - WEL 8-hr limit mg/m3 total respirable dust: - WEL 8-hr limit ppm: 20 WEL 15 min limit ppm: 40 WEL 8-hr limit mg/m3 total inhalable dust: - WEL 8-hr limit mg/m3 total respirable dust: -	WEL 8-hr limit mg/m3: 10 WEL 15 min limit mg/m3: - WEL 15 min limit mg/m3 total inhalable dust: - WEL 15 min limit mg/m3 total respirable dust: - WEL 8-hr limit mg/m3: 52 WEL 15 min limit mg/m3: 104 WEL 15 min limit mg/m3 total inhalable dust: - WEL 15 min limit mg/m3 total respirable dust: -
n-butane, Isobutane, Propane mixture	WEL 8-hr limit ppm: 1000 WEL 15 min limit ppm: 1250 WEL 8-hr limit mg/m3 total inhalable dust: - WEL 8-hr limit mg/m3 total respirable dust: -	WEL 8-hr limit mg/m3: 1750 WEL 15 min limit mg/m3: 2180 WEL 15 min limit mg/m3 total inhalable dust: - WEL 15 min limit mg/m3 total respirable dust: -

### 8.2. Exposure controls

8.2.1. Appropriate engineering controls	Not to be used inside vehicles. Ensure adequate ventilation of the working area.
8.2.2. Individual protection measures	Avoid contact with eyes and skin.
Eye / face protection	Approved safety goggles.
Skin protection - Handprotection	Chemical resistant gloves (PVC).
Respiratory protection	Do not breathe.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Clear
Odour	Characteristic
pH	10.5 - 11.5
Flash point	-60

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

	Avoid sparks, flames, heat and sources of ignition.
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### 10.2. Chemical stability

	Stable under normal conditions.
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### 10.3. Possibility of hazardous reactions

	Oxidising agents.
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### 10.4. Conditions to avoid

	Heat, sparks and open flames.
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### 10.5. Incompatible materials

	No data available.
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### 10.6. Hazardous decomposition products

	No data is available on this product.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

	Harmful if swallowed. Ingestion may cause nausea and vomiting.
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#### Skin corrosion/irritation

	CAUSES SKIN IRRITATION.
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#### Serious eye damage/irritation

	Causes serious eye irritation.
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### 11.1.4. Toxicological Information

	No data available
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## SECTION 12: Ecological information

### 12.1. Toxicity

	No data available
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### 12.2. Persistence and degradability

	No data on possible environmental effects have been found.
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### 12.3. Bioaccumulative potential

	No data is available on this product.
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### 12.4. Mobility in soil

	No data is available on this product.
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### 12.5. Results of PBT and vPvB assessment

	No data on possible environmental effects have been found.
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### Further information

	Not expected to have a significant environmental impact.
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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

	Dispose of waste and residues in accordance with local requirements. Do NOT incinerate the container even when empty.
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### General information

	Dispose of in compliance with all local and national regulations.
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## SECTION 14: Transport information

### Hazard pictograms

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## Hazard pictograms



## 14.1. UN number

UN1950

## 14.2. UN proper shipping name

AEROSOLS

## 14.3. Transport hazard class(es)

ADR/RID	2
Subsidiary risk	see SP63
IMDG	2
Subsidiary risk	see SP63
IATA	2
Subsidiary risk	see SP63

## 14.4. Packing group

Packing group -

## 14.5. Environmental hazards

Environmental hazards	No
Marine pollutant	No

## ADR/RID

Hazard ID	-
Tunnel Category	(D)

## IMDG

EmS Code	F-D S-U
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## IATA

Packing Instruction (Cargo)	203
Maximum quantity	150 kg
Packing Instruction (Passenger)	203
Maximum quantity	75 kg

## SECTION 15: Regulatory information

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

The classification detailed on this safety data sheet refers to the neat material only. Dilution of the product may reduce the classification. This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 & (EC) No. 1272/2208 & (EC) 1999/45.

## 15.2. Chemical safety assessment

No information available.

## SECTION 16: Other information

## Other information

Text of risk phrases in Section 3	R11 - Highly flammable. R22 - Harmful if swallowed. R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.
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## Other information

Text of Hazard Statements in Section 3	R34 - Causes burns. 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.
	Flam. Liq. 2: H225 - Highly flammable liquid and vapour. Acute Tox. 4: H302 - Harmful if swallowed. Flam. Gas 1: H220 - Extremely flammable gas. Liquified gas: H280 - Contains gas under pressure; may explode if heated. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Aquatic Acute 1: H400 - Very toxic to aquatic life. Acute Tox. 3: H301 - Toxic if swallowed. Acute Tox. 3: H311 - Toxic in contact with skin. Acute Tox. 3: H331 - Toxic if inhaled. STOT SE 1: H370 - Causes damage to organs . STOT SE 2: H371 - May cause damage to organs .

## Further information

	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.
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