



# Kroon-Oil De-Icer

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Issue date: 27-9-2018 Revision date: 5-8-2021 Supersedes version of: 6-2-2020 Version: 1.5

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : Kroon-Oil De-Icer  
UFI : NUH0-S0QD-900V-ARHM  
Product code : 10.20.02  
Type of product : Detergent  
Vaporizer : Spray  
Product group : Trade product

#### 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, Industrial use, Professional use  
Use of the substance/mixture : Use in de-icing and anti-icing fluids

##### 1.2.2. Uses advised against

No additional information available

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

Kroon Oil BV  
Dollegoorweg 15  
7602 EC Almelo - Netherlands  
T 0031 (0)546 81 81 65  
[vib@kroon-oil.nl](mailto:vib@kroon-oil.nl)

#### 1.4. Emergency telephone number

| Country        | Organisation/Company   | Address                                  | Emergency number   | Comment |
|----------------|--|--|--|---------|
| Ireland        | National Poisons Information Centre<br>Beaumont Hospital                                     | PO Box 1297<br>Beaumont Road<br>9 Dublin | +353 1 809 2566<br>(Healthcare professionals-<br>24/7)<br>+353 1 809 2166 (public,<br>8am - 10pm, 7/7) |         |
| United Kingdom | National Poisons Information Service<br>(Cardiff Centre)<br>Gwenwyn Ward, Llandough Hospital | Penarth<br>CF64 2XX Cardiff              | 0344 892 0111  |         |

### 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  
Serious eye damage/eye irritation, Category 2 H319  
Full text of H-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes serious eye irritation.

# Kroon-Oil De-Icer

## Safety Data Sheet

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

### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H226 - Flammable liquid and vapour.  
H319 - Causes serious eye irritation.

Precautionary statements (CLP) :

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.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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.  
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### 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<br>substance with national workplace exposure limit(s)<br>(GB)  | (CAS-No.) 64-17-5<br>(EC-No.) 200-578-6<br>(EC Index-No.) 603-002-00-5                                 | 50 – 80  | Flam. Liq. 2, H225<br>Eye Irrit. 2, H319                        |
| 1,2-ethanediol<br>substance with national workplace exposure limit(s)<br>(GB, IE); substance with a Community workplace<br>exposure limit | (CAS-No.) 107-21-1<br>(EC-No.) 203-473-3<br>(EC Index-No.) 603-027-00-1<br>(REACH-no) 01-2119456816-28 | 2,5 – 10 | Acute Tox. 4 (Oral), H302<br>STOT RE 2, H373                    |

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

: Rinse skin with water/shower. Take off immediately all contaminated clothing.

First-aid measures after eye contact

: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion

: If swallowed, rinse mouth with water (only if the person is conscious). Call a poison center or a doctor if you feel unwell.

# Kroon-Oil De-Icer

## Safety Data Sheet

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

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

- Symptoms/effects after inhalation : Inhalation may affect the nervous system causing headache, possibly dizziness, nausea, weakness, loss of coordination and unconsciousness.
- Symptoms/effects after eye contact : Eye irritation.
- Symptoms/effects after ingestion : Ingestion may cause nausea, vomiting and diarrhea.

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

Seek urgent medical help. Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
- Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Combustible liquid. Flammable liquid and vapour.
- Hazardous decomposition products in case of fire : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

### 5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing. Concerning personal protective equipment to use, see section 8.
- Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

# Kroon-Oil De-Icer

## Safety Data Sheet

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

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ground/bond container and receiving equipment.
- Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.
- Storage temperature : < 40 °C

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

| Ethanol (64-17-5)                             |                                       |
|---|---------------------------------------|
| United Kingdom - Occupational Exposure Limits |                                       |
| Local name                                    | Ethanol                               |
| WEL TWA (OEL TWA) [1]                         | 1920 mg/m <sup>3</sup>                |
| WEL TWA (OEL TWA) [2]                         | 1000 ppm                              |
| Regulatory reference                          | EH40/2005 (Fourth edition, 2020). HSE |

| 1,2-ethanediol (107-21-1)                          |   |
|--|---|
| EU - Indicative Occupational Exposure Limit (IOEL) |   |
| Local name   | Ethylene glycol   |
| IOEL TWA   | 52 mg/m <sup>3</sup>  |
| IOEL TWA [ppm]                                     | 20 ppm  |
| IOEL STEL  | 104 mg/m <sup>3</sup>   |
| IOEL STEL [ppm]                                    | 40 ppm  |
| Notes  | Skin  |
| Regulatory reference                               | COMMISSION DIRECTIVE 2000/39/EC                                 |
| Ireland - Occupational Exposure Limits             |   |
| Local name   | Ethane-1,2-diol [Ethylene glycol]                               |
| OEL TWA [1]  | 10 mg/m <sup>3</sup> particulate<br>52 mg/m <sup>3</sup> vapour |
| OEL TWA [2]  | 20 ppm vapour   |
| OEL STEL   | 104 mg/m <sup>3</sup> vapour                                    |
| OEL STEL [ppm]                                     | 40 ppm vapour   |

# Kroon-Oil De-Icer

## Safety Data Sheet

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

| 1,2-ethanediol (107-21-1)                     |  |
|---|--|
| Notes (IE)                                    | Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values) |
| Regulatory reference                          | Chemical Agents Code of Practice 2021  |
| United Kingdom - Occupational Exposure Limits |  |
| Local name                                    | Ethane-1,2-diol  |
| WEL TWA (OEL TWA) [1]                         | 10 mg/m <sup>3</sup> particulate<br>52 mg/m <sup>3</sup> vapour  |
| WEL TWA (OEL TWA) [2]                         | 20 ppm vapour  |
| WEL STEL (OEL STEL)                           | 104 mg/m <sup>3</sup> vapour   |
| WEL STEL (OEL STEL) [ppm]                     | 40 ppm vapour  |
| Remark (WEL)                                  | Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)                              |
| Regulatory reference                          | EH40/2005 (Fourth edition, 2020). HSE  |

### 8.1.2. Recommended monitoring procedures

No additional information available

### 8.1.3. Air contaminants formed

No additional information available

### 8.1.4. DNEL and PNEC

No additional information available

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

| Eye protection:  |                      |                 |          |
|--|----------------------|-----------------|----------|
| Safety glasses with side shields. (EN 166). Safety glasses |                      |                 |          |
| Type   | Field of application | Characteristics | Standard |
| Safety glasses   | Droplet              | clear           | EN 166   |

#### 8.2.2.2. Skin protection

| Skin and body protection:         |
|-----------------------------------|
| Wear suitable protective clothing |

# Kroon-Oil De-Icer

## Safety Data Sheet

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

| <b>Hand protection:</b>  |                      |                   |                |             |            |
|--|----------------------|-------------------|----------------|-------------|------------|
| Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Time of penetration is to be checked with the glove producer |                      |                   |                |             |            |
| Type   | Material             | Permeation        | Thickness (mm) | Penetration | Standard   |
| Reusable gloves  | Nitrile rubber (NBR) | 6 (> 480 minutes) | ≥ 0.35         |             | EN ISO 374 |

### 8.2.2.3. Respiratory protection

| <b>Respiratory protection:</b>  |
|---|
| No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. Air-fed respiratory protective equipment should be worn when this product is sprayed if the exposure of the sprayer or other people nearby cannot be controlled to below the occupational exposure limit. Approved organic vapour respirator |

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

#### Other information:

Provide local exhaust or general room ventilation to minimize mist and/or vapour concentrations. Do not eat, drink or smoke during use. Always wash hands after handling the product.

## SECTION 9: Physical and chemical properties

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

|   |                                      |
|---|--------------------------------------|
| Physical state                                  | : Liquid                             |
| Colour  | : Blue.                              |
| Odour   | : citrus.                            |
| Odour threshold                                 | : No data available                  |
| pH  | : 6,5 – 9,5                          |
| Relative evaporation rate (butylacetate=1)      | : No data available                  |
| Melting point                                   | : Not applicable                     |
| Freezing point                                  | : No data available                  |
| Boiling point                                   | : 84 °C                              |
| Flash point                                     | : 23 °C                              |
| Auto-ignition temperature                       | : 400 °C                             |
| Decomposition temperature                       | : No data available                  |
| Flammability (solid, gas)                       | : Not applicable                     |
| Vapour pressure                                 | : 4446 Pa (20°C)                     |
| Vapour pressure at 50 °C                        | : 214,92 hPa                         |
| Relative vapour density at 20 °C                | : No data available                  |
| Relative density                                | : 0,851                              |
| Density   | : 886 kg/m <sup>3</sup> at 20 °C     |
| Solubility                                      | : Water: Miscible in all proportions |
| Partition coefficient n-octanol/water (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                  |
| Lower explosive limit (LEL)                     | : 3,4 vol %                          |
| Upper explosive limit (UEL)                     | : 19 vol %                           |

### 9.2. Other information

No additional information available

# Kroon-Oil De-Icer

## Safety Data Sheet

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

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Stable under normal conditions. Flammable liquid and vapour.

#### 10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use. During handling at high temperatures : In the presence of water, forms corrosive solutions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Reacts violently with (strong) oxidizers.

#### 10.4. Conditions to avoid

Hygroscopic product. Prevent moisture contact. Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

Strong oxidizing agents.

#### 10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes. Carbon oxides (CO, CO<sub>2</sub>).

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

| Ethanol (64-17-5)                 |  |
|-----------------------------------|--|
| LD50 oral rat                     | 15010 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 14450 - 15560 |
| LD50 oral                         | 8300 mg/kg bodyweight Animal: mouse  |
| LD50 dermal                       | 15800 mg/kg bodyweight   |
| LC50 Inhalation - Rat (Dust/Mist) | > 99999 mg/l   |

| 1,2-ethanediol (107-21-1) |   |
|---------------------------|---|
| LD50 oral rat             | 7712 mg/kg bodyweight   |
| LD50 oral                 | There is a marked difference in acute oral toxicity between rodents and man, man being more susceptible than rodents. The estimated fatal dose for man is 30-100 milliliters. This material has also been shown to be toxic and potentially lethal by ingestion to cats and dogs. |
| LD50 dermal               | 3500 mg/kg bodyweight mouse   |
| LC50 Inhalation - Rat     | > 2,5 mg/l  |

Skin corrosion/irritation : Not classified  
pH: 6,5 – 9,5  
Serious eye damage/irritation : Causes serious eye irritation.  
pH: 6,5 – 9,5  
Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

# Kroon-Oil De-Icer

## Safety Data Sheet

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

### 1,2-ethanediol (107-21-1)

|   |  |
|---|--|
| NOAEL (chronic, oral, animal/male, 2 years) | 1500 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information) |
|---|--|

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

### 1,2-ethanediol (107-21-1)

|                        |   |
|------------------------|---|
| STOT-repeated exposure | May cause damage to organs (kidneys) through prolonged or repeated exposure (if swallowed). |
|------------------------|---|

Aspiration hazard : Not classified

### Kroon-Oil De-Icer

|           |       |
|-----------|-------|
| Vaporizer | Spray |
|-----------|-------|

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

### Ethanol (64-17-5)

|                                    |  |
|------------------------------------|--|
| LC50 - Fish [1]                    | 14,2 g/l Test organisms (species): Pimephales promelas           |
| EC50 - Other aquatic organisms [1] | 5012 mg/l waterflea  |
| EC50 - Other aquatic organisms [2] | 275 mg/l   |
| NOEC (chronic)                     | 9,6 mg/l Test organisms (species): Daphnia magna Duration: '9 d' |

### 1,2-ethanediol (107-21-1)

|                      |   |
|----------------------|---|
| LC50 - Fish [1]      | 72860 mg/l Test organisms (species): Pimephales promelas  |
| EC50 - Crustacea [1] | > 100 mg/l Test organisms (species): Daphnia magna  |
| EC50 96h - Algae [1] | 3536 mg/l Test organisms (species): other:greenn algae  |
| EC50 96h - Algae [2] | 6500 – 13000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) |
| NOEC (chronic)       | ≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'                                       |

### 12.2. Persistence and degradability

### Kroon-Oil De-Icer

|                               |                |
|-------------------------------|----------------|
| Persistence and degradability | Biodegradable. |
|-------------------------------|----------------|

# Kroon-Oil De-Icer

## Safety Data Sheet

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

### 1,2-ethanediol (107-21-1)

|                |                               |
|----------------|-------------------------------|
| Biodegradation | 90 % > 10d (OECD 301A method) |
|----------------|-------------------------------|

### 12.3. Bioaccumulative potential

#### Ethanol (64-17-5)

|   |       |
|---|-------|
| Partition coefficient n-octanol/water (Log Pow) | -0,32 |
|---|-------|

#### 1,2-ethanediol (107-21-1)

|   |       |
|---|-------|
| Partition coefficient n-octanol/water (Log Kow) | -1,36 |
|---|-------|

### 12.4. Mobility in soil

#### 1,2-ethanediol (107-21-1)

|   |   |
|---|---|
| Partition coefficient n-octanol/water (Log Koc) | 1 |
|---|---|

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

|                                   |   |
|-----------------------------------|---|
| Waste treatment methods           | : Dispose of contents/container in accordance with licensed collector's sorting instructions.   |
| Additional information            | : Flammable vapours may accumulate in the container.  |
| European List of Waste (LoW) code | : 16 05 08* - discarded organic chemicals consisting of or containing dangerous substances  |
| HP Code                           | : HP3 - "Flammable:"<br>— flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;<br>— flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;<br>— flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;<br>— flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;<br>— water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;<br>— other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.<br>HP4 - "Irritant — skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. |

## SECTION 14: Transport information






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

| ADR                    | IMDG    | IATA    | ADN     | RID     |
|------------------------|---------|---------|---------|---------|
| <b>14.1. UN number</b> |         |         |         |         |
| UN 1170                | UN 1170 | UN 1170 | UN 1170 | UN 1170 |

# Kroon-Oil De-Icer

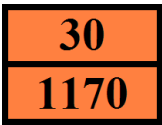
## Safety Data Sheet

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

| 14.2. UN proper shipping name   |   |   |   |   |
|---|---|---|---|---|
| ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) (Ethanol)                               | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) (Ethanol)                               | Ethyl alcohol solution (Ethanol)  | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) (Ethanol)                                 | ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) (Ethanol)                                 |
| Transport document description  |   |   |   |   |
| UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) (Ethanol), 3, III, (D/E)        | UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) (Ethanol), 3, III               | UN 1170 Ethyl alcohol solution (Ethanol), 3, III                                  | UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) (Ethanol), 3, III                 | UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION) (Ethanol), 3, III                 |
| 14.3. Transport hazard class(es)  |   |   |   |   |
| 3   | 3   | 3   | 3   | 3   |
|  |  |  |  |  |
| 14.4. Packing group   |   |   |   |   |
| III   | III   | III   | III   | III   |
| 14.5. Environmental hazards   |   |   |   |   |
| Dangerous for the environment : No  | Dangerous for the environment : No<br>Marine pollutant : No                       | Dangerous for the environment : No  | Dangerous for the environment : No  | Dangerous for the environment : No  |
| No supplementary information available  |   |   |   |   |

### 14.6. Special precautions for user

#### Overland transport

|   |   |
|---|---|
| Classification code (ADR)                                 | : F1  |
| Special provisions (ADR)                                  | : 144, 601  |
| Limited quantities (ADR)                                  | : 5I  |
| Excepted quantities (ADR)                                 | : E1  |
| Packing instructions (ADR)                                | : P001, IBC03, LP01, R001   |
| Mixed packing provisions (ADR)                            | : MP19  |
| Portable tank and bulk container instructions (ADR)       | : T2  |
| Portable tank and bulk container special provisions (ADR) | : TP1   |
| Tank code (ADR)   | : LGBF  |
| Vehicle for tank carriage                                 | : FL  |
| Transport category (ADR)                                  | : 3   |
| Special provisions for carriage - Packages (ADR)          | : V12   |
| Special provisions for carriage - Operation (ADR)         | : S2  |
| Hazard identification number (Kemler No.)                 | : 30  |
| Orange plates   | :  |

|                               |        |
|-------------------------------|--------|
| Tunnel restriction code (ADR) | : D/E  |
| EAC code                      | : •2YE |

#### Transport by sea

|                                 |              |
|---------------------------------|--------------|
| Special provisions (IMDG)       | : 144, 223   |
| Limited quantities (IMDG)       | : 5 L        |
| Excepted quantities (IMDG)      | : E1         |
| Packing instructions (IMDG)     | : P001, LP01 |
| IBC packing instructions (IMDG) | : IBC03      |
| Tank instructions (IMDG)        | : T2         |

# Kroon-Oil De-Icer

## Safety Data Sheet

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

|                                    |   |
|------------------------------------|---|
| Tank special provisions (IMDG)     | : TP1   |
| EmS-No. (Fire)                     | : F-E   |
| EmS-No. (Spillage)                 | : S-D   |
| Stowage category (IMDG)            | : A   |
| Properties and observations (IMDG) | : Colourless, volatile liquids. Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19% Miscible with water. |

### Air transport

|  |                 |
|--|-----------------|
| PCA Excepted quantities (IATA)               | : E1            |
| PCA Limited quantities (IATA)                | : Y344          |
| PCA limited quantity max net quantity (IATA) | : 10L           |
| PCA packing instructions (IATA)              | : 355           |
| PCA max net quantity (IATA)                  | : 60L           |
| CAO packing instructions (IATA)              | : 366           |
| CAO max net quantity (IATA)                  | : 220L          |
| Special provisions (IATA)                    | : A3, A58, A180 |
| ERG code (IATA)                              | : 3L            |

### Inland waterway transport

|                                   |             |
|-----------------------------------|-------------|
| Classification code (ADN)         | : F1        |
| Special provisions (ADN)          | : 144, 601  |
| Limited quantities (ADN)          | : 5 L       |
| Excepted quantities (ADN)         | : E1        |
| Equipment required (ADN)          | : PP, EX, A |
| Ventilation (ADN)                 | : VE01      |
| Number of blue cones/lights (ADN) | : 0         |

### Rail transport

|   |                           |
|---|---------------------------|
| Classification code (RID)                                 | : F1                      |
| Special provisions (RID)                                  | : 144, 601                |
| Limited quantities (RID)                                  | : 5L                      |
| Excepted quantities (RID)                                 | : E1                      |
| Packing instructions (RID)                                | : P001, IBC03, LP01, R001 |
| Mixed packing provisions (RID)                            | : MP19                    |
| Portable tank and bulk container instructions (RID)       | : T2                      |
| Portable tank and bulk container special provisions (RID) | : TP1                     |
| Tank codes for RID tanks (RID)                            | : LGBF                    |
| Transport category (RID)                                  | : 3                       |
| Special provisions for carriage – Packages (RID)          | : W12                     |
| Colis express (express parcels) (RID)                     | : CE4                     |
| Hazard identification number (RID)                        | : 30                      |

## 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

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

|                           |                  |
|---------------------------|------------------|
| Child-resistant fastening | : Not applicable |
| Tactile warning           | : Not applicable |

# Kroon-Oil De-Icer

## Safety Data Sheet

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

| Detergent Regulation : Labelling of contents (648/2004/EC): |     |
|---|-----|
| Component   | %   |
| anionic surfactants   | <5% |
| perfumes  |     |

### Directive 2012/18/EU (SEVESO III)

| Seveso III Part I (Categories of dangerous substances)                                   | Qualifying quantity (tonnes) |            |
|--|------------------------------|------------|
|  | Lower-tier                   | Upper-tier |
| P5c FLAMMABLE LIQUIDS<br>Flammable liquids, Categories 2 or 3 not covered by P5a and P5b | 5000                         | 50000      |

### 15.1.2. National regulations

Ensure all national/local regulations are observed

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

| Indication of changes: |   |          |          |
|------------------------|---|----------|----------|
| Section                | Changed item  | Change   | Comments |
|                        | Portable tank and bulk container instructions (ADR)       | Modified |          |
|                        | Portable tank and bulk container special provisions (ADR) | Modified |          |
|                        | Special provisions (IMDG)                                 | Modified |          |
|                        | Tank instructions (IMDG)                                  | Modified |          |
|                        | Tank special provisions (IMDG)                            | Modified |          |
|                        | Proper Shipping Name (IMDG)                               | Modified |          |
|                        | Proper Shipping Name (IATA)                               | Modified |          |
|                        | Special provisions (IATA)                                 | Modified |          |
|                        | Special provisions (RID)                                  | Modified |          |
|                        | Portable tank and bulk container instructions (RID)       | Modified |          |
|                        | Portable tank and bulk container special provisions (RID) | Modified |          |
|                        | Proper Shipping Name (RID)                                | Modified |          |
|                        | UN-No. (RID)  | Modified |          |
|                        | Properties and observations (IMDG)                        | Added    |          |
|                        | Excepted quantities (IMDG)                                | Added    |          |
|                        | Limited quantities (IMDG)                                 | Added    |          |
|                        | Limited quantities (RID)                                  | Added    |          |
|                        | Vaporizer   | Added    |          |
|                        | Type of product   | Added    |          |

# Kroon-Oil De-Icer

## Safety Data Sheet

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

|      |  |          |  |
|------|--|----------|--|
| 1.2  | Main use category                      | Modified |  |
| 2.2  | Precautionary statements (CLP)         | Modified |  |
| 3    | Composition/information on ingredients | Modified |  |
| 4.1  | First-aid measures after ingestion     | Modified |  |
| 5.2  | Fire hazard                            | Modified |  |
| 5.3  | EAC code                               | Modified |  |
| 7.2  | Storage temperature                    | Added    |  |
| 9.1  | Solubility in water                    | Modified |  |
| 10.3 | Possibility of hazardous reactions     | Modified |  |
| 13.1 | H code                                 | Added    |  |
| 14.1 | UN-No. (IATA)                          | Modified |  |
| 14.1 | UN-No. (IMDG)                          | Modified |  |
| 14.1 | UN-No. (ADR)                           | Modified |  |
| 14.1 | UN-No. (ADN)                           | Modified |  |
| 14.2 | Proper Shipping Name (ADR)             | Modified |  |
| 14.2 | Proper Shipping Name (ADN)             | Modified |  |
| 14.6 | Special provisions (ADR)               | Modified |  |
| 14.6 | Special provisions (ADN)               | Modified |  |
| 16   | Abbreviations and acronyms             | Modified |  |

### Abbreviations and acronyms:

|        |   |
|--------|---|
| CLP    | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                       |
| REACH  | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| ADN    | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways   |
| ADR    | European Agreement concerning the International Carriage of Dangerous Goods by Road               |
| ATE    | Acute Toxicity Estimate   |
| BCF    | Bioconcentration factor   |
| BLV    | Biological limit value  |
| BOD    | Biochemical oxygen demand (BOD)   |
| COD    | Chemical oxygen demand (COD)  |
| DMEL   | Derived Minimal Effect level  |
| DNEL   | Derived-No Effect Level   |
| EC-No. | European Community number   |
| EC50   | Median effective concentration  |
| EN     | European Standard   |
| IARC   | International Agency for Research on Cancer   |
| IATA   | International Air Transport Association   |
| IMDG   | International Maritime Dangerous Goods  |
| LC50   | Median lethal concentration   |

# Kroon-Oil De-Icer

## Safety Data Sheet

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

|         |  |
|---------|--|
| LD50    | Median lethal dose   |
| LOAEL   | Lowest Observed Adverse Effect Level   |
| NOAEC   | No-Observed Adverse Effect Concentration                                     |
| NOAEL   | No-Observed Adverse Effect Level   |
| NOEC    | No-Observed Effect Concentration   |
| OECD    | Organisation for Economic Co-operation and Development                       |
| OEL     | Occupational Exposure Limit  |
| PBT     | Persistent Bioaccumulative Toxic   |
| PNEC    | Predicted No-Effect Concentration  |
| RID     | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS     | Safety Data Sheet  |
| STP     | Sewage treatment plant   |
| ThOD    | Theoretical oxygen demand (ThOD)   |
| TLM     | Median Tolerance Limit   |
| VOC     | Volatile Organic Compounds   |
| CAS-No. | Chemical Abstract Service number   |
| N.O.S.  | Not Otherwise Specified  |
| vPvB    | Very Persistent and Very Bioaccumulative                                     |
| ED      | Endocrine disrupting properties  |

Training advice : Not to be used for any purpose other than the one the product was designed for.

| 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                                      |
| 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. |

Safety Data Sheet (SDS), EU

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.