SAFETY DATA SHEET

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

1.1. Product identifier

Trade name
Decalifier

Product no.
67

REACH registration number
Not applicable

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

Relevant identified uses of the substance or mixture
Highly effective non-foaming decalifier
Washing and Cleaning Products (including solvent based products) (PC35)
Use in closed process, no likelihood of exposure (PROC 1)
Professional uses: Public domain (administration, education, entertainment, services, craftsmen) (SU 22)

Uses advised against

The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address
Frontmatec Smørum A/S
Hassellunden 9
2765 Smørum
Denmark
Phone: +45 445 037 00 • E-mail: smoerum@frontmatec.com

Contact person
Mette Borg

E-mail
mb@iduna.dk

SDS date
2018-04-23

SDS Version
2.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 “First aid measures”.

SECTION 2: Hazards identification

▼2.1. Classification of the substance or mixture

Not classified according to Regulation (EC) No. 1272/2008 (CLP)

2.2. Label elements

Hazard pictogram(s)
Not applicable

Signal word

▼Hazard statement(s)
Not applicable-

Safety statement(s)

General

Prevention

Response

Storage

Disposal

▼Identity of the substances primarily responsible for the major health hazards
According to EC-Regulation 2015/830

Not applicable

2.3. Other hazards
Not applicable

2.4. Additional labelling
Safety data sheet available on request. (EUH210)

2.5. Additional warnings
Not applicable

VOC
Not applicable

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

NAME: Water
IDENTIFICATION NOS.: CAS-no: 7732-18-5
CONTENT: 80-95%
CLP CLASSIFICATION: NA

NAME: ortho phosphoric acid
IDENTIFICATION NOS.: CAS-no: 7664-38-2 EC-no: 231-633-2 Index-no: 015-011-00-6
CONTENT: 5 - <10%
CLP CLASSIFICATION: Skin Corr. 1B H314
NOTE: L

NAME: (+)-tartaric acid
IDENTIFICATION NOS.: CAS-no: 87-69-4 EC-no: 201-766-0 REACH-no: 02-2119676676-20-0000
CONTENT: 1 - <2.5%
CLP CLASSIFICATION: Eye Irrit. 2 H319

(*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.
L = European occupational exposure limit.

Other information

Eye Cat. 2 Sum = Sum(Cl/S(G)CLi) = 0,64 - 0,96
Skin Cat. 2 Sum = Sum(Cl/S(G)CLi) = 0,48 - 0,72

SECTION 4: First aid measures

4.1. Description of first aid measures

4 General information
In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service (dial 111, 24 h service). Contact a doctor if in doubt about the injured person’s condition or if the symptoms persist. Never give an unconscious person water or other drink.

4 Inhalation
Bring the person into fresh air and stay with him/her.

4 Skin contact
Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

4 Eye contact
Remove contact lenses and open eyes widely. Flush eyes with water or saline water(20-30°C) for at least 15 minutes. Seek medical assistance and continue flushing during transport.

4 Ingestion
Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns
Not applicable

4.2. Most important symptoms and effects, both acute and delayed
Nothing special

4.3. Indication of any immediate medical attention and special treatment needed
According to EC-Regulation 2015/830

Nothing special

**Information to medics**
Bring this safety data sheet.

### SECTION 5: Firefighting measures

**5.1. Extinguishing media**
Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

**5.2. Special hazards arising from the substance or mixture**
If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Firefighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

**5.3. Advice for firefighters**
No specific requirements.

### SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**
No specific requirements.

**6.2. Environmental precautions**
NOT USED

**6.3. Methods and material for containment and cleaning up**
Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

**6.4. Reference to other sections**
See section on “Disposal considerations” in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

### SECTION 7: Handling and storage

**7.1. Precautions for safe handling**
See section on 'Exposure controls/personal protection' for information on personal protection.

**7.2. Conditions for safe storage, including any incompatibilities**
Always store in containers of the same material as the original container.

**7.3. Specific end use(s)**
This product should only be used for applications quoted in section 1.2

### SECTION 8: Exposure controls/personal protection

**8.1. Control parameters**

**OEL**
- ortho phosphoric acid
  - Long-term exposure limit (8-hour TWA reference period): - ppm | 1 mg/m³
  - Short-term exposure limit (15-minute reference period): - ppm | 2 mg/m³

**DNEL / PNEC**
- DNEL (ortho phosphoric acid): 2.92 mg/m³
  - Exposure: Inhalation
  - Duration of Exposure: Long term – Local effects - Workers

**8.2. Exposure controls**

- Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.
  - **General recommendations**
  - **Smoking, eating and drinking are not allowed in the work premises**

- **Exposure scenarios**
  - In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

- **Exposure limits**
According to EC-Regulation 2015/830

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

**Appropriate technical measures**
Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

**Hygiene measures**
In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

**Measures to avoid environmental exposure**

**Individual protection measures, such as personal protective equipment**

- **Not applicable**
- **Generally**
  - Use only CE marked protective equipment.
- **Respiratory Equipment**
  - No specific requirements.
- **Skin protection**
  - No specific requirements.
- **Hand protection**
  - No specific requirements.
- **Eye protection**
  - No specific requirements.

### SECTION 9: Physical and chemical properties

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold (ppm)</td>
<td>No data available.</td>
</tr>
<tr>
<td>pH</td>
<td>2.1</td>
</tr>
<tr>
<td>Viscosity (40°C)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Density (g/cm³)</td>
<td>1.05</td>
</tr>
</tbody>
</table>

**Phase changes**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point (°C)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Boiling point (°C)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available.</td>
</tr>
<tr>
<td>Decomposition temperature (°C)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Evaporation rate (n-butylacetate = 100)</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

**Data on fire and explosion hazards**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point (°C)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Ignition (°C)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Auto flammability (°C)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Explosion limits (% v/v)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

**Solubility**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility in water</td>
<td>Soluble</td>
</tr>
<tr>
<td>n-octanol/water coefficient</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

**9.2. Other information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility in fat (g/L)</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

**10.1. Reactivity**

No data available

**10.2. Chemical stability**

- The product is stable under the conditions, noted in the section "Handling and storage".

**10.3. Possibility of hazardous reactions**

- Nothing special

**10.4. Conditions to avoid**

- Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.
According to EC-Regulation 2015/830

10.5. Incompatible materials
Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.
10.6. Hazardous decomposition products
The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
Substance: (+)-tartaric acid
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 3200 mg/kg

Substance: ortho phosphoric acid
Species: Rabbit
Test: LD50
Route of exposure: Dermal
Result: 2,740 mg/kg

Substance: ortho phosphoric acid
Species: Rat
Test: LC50
Route of exposure: Inhalation
Result: 1,69 mg/l

SKIN corrosion/irritation
No data available.

Serious eye damage/irritation
No data available.

Respiratory or skin sensitisation
No data available.

Germ cell mutagenicity
No data available.

Carcinogenicity
No data available.

Reproductive toxicity
Data on substance: ortho phosphoric acid
Organism: Rat
Result: >=500 mg/kg
No adverse effect observed.

STOT-single exposure
No data available.

STOT-repeated exposure
No data available.

Aspiration hazard
No data available.

Long term effects
Nothing special

SECTION 12: Ecological information

12.1. Toxicity
Substance: ortho phosphoric acid
Species: Fish
Test: LC50
Duration: 96h
Result: 138 mg/l

Substance: ortho phosphoric acid
Species: Fish
Test: NOEC
Duration: 72h
According to EC-Regulation 2015/830

Result: 100 mg/l
Substance: ortho phosphoric acid
Species: Daphnia
Test: EC50
Duration: 48h
Result: 100 mg/l

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Substance</th>
<th>Biodegradability</th>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No data available.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>Potential bioaccumulation</th>
<th>LogPow</th>
<th>BCF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No data available.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

(+)-tartaric acid: Log Koc= 0,268456, Calculated from LogPow (High mobility potential.).

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Other adverse effects

Nothing special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is not covered by regulations on dangerous waste.

Waste

<table>
<thead>
<tr>
<th>EWC code</th>
</tr>
</thead>
<tbody>
<tr>
<td>200114</td>
</tr>
</tbody>
</table>

Specific labelling

- Contaminated packing

No specific requirements.

SECTION 14: Transport information

14.1 – 14.4

Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID

| 14.1. UN number | - |
| 14.2. UN proper shipping name | - |
| 14.3. Transport hazard class(es) | - |
| 14.4. Packing group | - |
| Notes | - |
| Tunnel restriction code | - |

IMDG

| UN-no.                   | - |
| Proper Shipping Name    | - |
| Class                   | - |
| PG*                     | - |
| EmS                     | - |
| MP**                    | - |
| Hazardous constituent   | - |

IATA/ICAO

| UN-no. | - |
| Proper Shipping Name | - |
| Class | - |
| PG* | - |

14.5. Environmental hazards

- 

14.6. Special precautions for user

-
According to EC-Regulation 2015/830

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
No data available

(*) Packing group
(**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

Additional information
Not applicable

Seveso

Sources
EC regulation 1907/2006 (REACH).

15.2. Chemical safety assessment
No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3
H314 - Causes severe skin burns and eye damage.
H319 - Causes serious eye irritation.

The full text of identified uses as mentioned in section 1
PC35 = Washing and Cleaning Products (including solvent based products)
PROC 1 = Use in closed process, no likelihood of exposure
SU 22 = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Additional label elements
Not applicable

Other
It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification. The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products. A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by
kb

Date of last essential change
(First cipher in SDS version)
2015-05-13

Date of last minor change
(Last cipher in SDS version)
2015-05-13