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

1.1. Product identifier

Identification of the substance/preparation

Propionic acid AF

CAS-No
79-09-4

EC No.
201-176-3

Registration number (REACH)
-

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

Identified uses
Feed Additive according to Regulation 1831/2003/EC
Intermediate***

Uses advised against
None

1.3. Details of the supplier of the safety data sheet

Company/Undertaking
OXEA GmbH
Ottro-Roelen-Str. 3
D-46147 Oberhausen
Germany

Product Information
Product Stewardship
FAX: +49 (0)208 693 2053
email: psq@oxea-chemicals.com

1.4. Emergency telephone number

Emergency telephone number
+44 (0) 1235 239 670 (UK)
available 24/7

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This substance is classified based on Directive 1272/2008/EC and its amendments (CLP Regulation)

- Flammable liquid Category 3, H226
- Skin corrosion/irritation Category 1B, H314
- Serious eye damage/eye irritation Category 1, H318
- Target Organ Systemic Toxicant - Single exposure Category 3, H335

Additional information
For full text of Hazard- and EU Hazard-statements see SECTION 16.

2.2. Label elements

Labelling according to Regulation 1272/2008/EC and its amendments (CLP Regulation).
Hazard pictograms

Signal word Danger

Hazard statements
H226: Flammable liquid and vapour.
H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation.

Precautionary statements
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260: Do not breathe gas/mist/vapours.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P310: Immediately call a POISON CENTER/doctor.
P403 + P233: Store in a well ventilated place. Keep container tightly closed.
P235: Keep cool.

2.3. Other hazards
Vapour/air-mixtures are explosive at intense warming
Components of the product may be absorbed into the body by inhalation and ingestion

PBT and vPvB assessment Not required

SECTION 3: Composition / information on ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>REACh-No</th>
<th>1272/2008/EC</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propionic acid</td>
<td>79-09-4</td>
<td>01-2119486971-24**</td>
<td></td>
<td>&gt; 99,5</td>
</tr>
</tbody>
</table>

For full text of Hazard- and EU Hazard-statements see SECTION 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
Keep at rest. Aerate with fresh air. When symptoms persist or in all cases of doubt seek medical advice.
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Skin
Wash off immediately with soap and plenty of water. When symptoms persist or in all cases of doubt seek medical advice.

Eyes
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

Ingestion
Call a physician immediately. Do not induce vomiting without medical advice.

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

Main symptoms
cough, shortness of breath, abdominal pain, nausea, vomiting, circulatory collapse.

Special hazard
Lung irritation.

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

General advice
Remove contaminated, soaked clothing immediately and dispose of safely. First aider needs to protect himself.
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
foam, dry chemical, carbon dioxide (CO2), water spray

Unsuitable Extinguishing Media
Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Under conditions giving incomplete combustion, hazardous gases produced may consist of:
carbon monoxide (CO)
carbon dioxide (CO2)
Combustion gases of organic materials must in principle be graded as inhalation poisons
Vapours are heavier than air and may spread along floors
Vapour/air-mixtures are explosive at intense warming

5.3. Advice for firefighters

Special protective equipment for firefighters
Fire fighter protection should include a self-contained breathing apparatus (NIOSH-approved or EN 133) and full fire-fighting turn out gear.

Precautions for firefighting
Cool containers / tanks with water spray. Water run-off and vapor cloud may be corrosive. Dike and collect water used to fight fire. Keep people away from and upwind of fire.
SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
For non-emergency personnel: For personal protective equipment see section 8. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep people away from and upwind of spill/leak. Ensure adequate ventilation, especially in confined areas. Keep away from heat and sources of ignition.
For emergency responders: Personal protection see section 8.***

6.2. Environmental precautions
Prevent further leakage or spillage. Do not discharge product into the aquatic environment without pretreatment (biological treatment plant).

6.3. Methods and material for containment and cleaning up

Methods for containment
Stop the flow of material, if possible without risk. Dike spilled material, where this is possible.

Methods for cleaning up
Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Dispose of in accordance with local regulations. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

6.4. Reference to other sections
For personal protective equipment see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Provide sufficient air exchange and/or exhaust in work rooms.

Hygiene measures
When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.

Advice on the protection of the environment
See Section 8: Environmental exposure controls.

Incompatible products
bases
amines
strong oxidizing agents

7.2. Conditions for safe storage, including any incompatibilities

Advice on protection against fire and explosion
Keep away from sources of ignition - No smoking. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). In case of fire, emergency cooling with water spray should be available. Ground and bond containers when transferring material. Vapour/air-mixtures are explosive at intense warming.
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Technical measures/Storage conditions
Keep containers tightly closed in a cool, well-ventilated place. Handle and open container with care. Keep at temperatures between -12°C and 38°C (10°F and 100°F).

Temperature class
T2

7.3. Specific end use(s)
Feed Additive according to Regulation 1831/2003/EC
Intermediate***

SECTION 8: Exposure controls / personal protection

8.1. Control parameters

Exposure limits European Union


<table>
<thead>
<tr>
<th>Component</th>
<th>TWA (mg/m³)</th>
<th>TWA (ppm)</th>
<th>STEL (mg/m³)</th>
<th>STEL (ppm)</th>
<th>Skin Absorption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propionic acid</td>
<td>31</td>
<td>10</td>
<td>62</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>CAS: 79-09-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Exposure limits UK

EH40 WELs

<table>
<thead>
<tr>
<th>Component</th>
<th>TWA (mg/m³)</th>
<th>TWA (ppm)</th>
<th>STEL (mg/m³)</th>
<th>STEL (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propionic acid</td>
<td>31</td>
<td>10</td>
<td>46</td>
<td>15</td>
</tr>
<tr>
<td>CAS: 79-09-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note
For details and further information please refer to the original regulation.

DNEL & PNEC

Propionic acid, CAS: 79-09-4

Workers

<table>
<thead>
<tr>
<th>DN(M)EL - long-term exposure - systemic effects - Inhalation</th>
<th>73*** mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>DN(M)EL - acute / short-term exposure - systemic effects - Inhalation</td>
<td>No hazard identified***</td>
</tr>
<tr>
<td>DN(M)EL - long-term exposure - local effects - Inhalation</td>
<td>31 mg/m³</td>
</tr>
<tr>
<td>DN(M)EL - acute / short-term exposure - local effects - Inhalation</td>
<td>62 mg/m³</td>
</tr>
<tr>
<td>DN(M)EL - long-term exposure - systemic effects - Dermal</td>
<td>20.9*** mg/kg bw/day</td>
</tr>
<tr>
<td>DN(M)EL - acute / short-term exposure - systemic effects - Dermal</td>
<td>Medium hazard (no threshold derived)***</td>
</tr>
<tr>
<td>DN(M)EL - long-term exposure - local effects - Dermal</td>
<td>Medium hazard (no threshold derived)***</td>
</tr>
<tr>
<td>DN(M)EL - acute / short-term exposure - local effects - Dermal</td>
<td>Medium hazard (no threshold derived)***</td>
</tr>
<tr>
<td>DN(M)EL - local effects - eyes</td>
<td>Medium hazard (no threshold derived)***</td>
</tr>
</tbody>
</table>
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General population

DN(M)EL - long-term exposure - systemic effects - Inhalation
18,3***/mg/m³***/
No hazard identified***/

DN(M)EL - acute / short-term exposure - systemic effects - Inhalation
3,7***/mg/m³***/

DN(M)EL - long-term exposure - local effects - Inhalation
30,8***/mg/m³***/

DN(M)EL - acute / short-term exposure - local effects - Inhalation
10,5***/mg/kg bw/day***/

DN(M)EL - long-term exposure - systemic effects - Dermal
Medium hazard (no threshold derived)***

DN(M)EL - acute / short-term exposure - systemic effects - Dermal
Medium hazard (no threshold derived)***

DN(M)EL - long-term exposure - local effects - Dermal
Medium hazard (no threshold derived)***

DN(M)EL - acute / short-term exposure - local effects - Dermal
Medium hazard (no threshold derived)***

Environment

PNEC aqua - freshwater
0,5 mg/l

PNEC aqua - marine water
0,05 mg/l

PNEC aqua - intermittent releases
5 mg/l

PNEC STP
5 mg/l

PNEC sediment - freshwater
1,86 mg/kg

PNEC sediment - marine water
0,186 mg/kg

PNEC soil
0,1258 mg/kg

Secondary poisoning
No potential for bioaccumulation

8.2. Exposure controls

Special adaptations (REACH)
Not applicable.

Appropriate Engineering controls
General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Explosion-proof equipment (for example fans, switches, and grounded ducts) should be used in mechanical ventilation systems.

Personal protective equipment

General industrial hygiene practice
Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Ensure that eyewash stations and safety showers are close to the workstation location.

Hygiene measures
When using, do not eat, drink or smoke. Take off all contaminated clothing immediately. Wash hands before breaks and immediately after handling the product.

Eye protection
Tightly fitting safety goggles. In addition to goggles, wear a face shield if there is a reasonable chance for splash to the face.

Equipment should conform to EN 166
SAFETY DATA SHEET

Hand protection
Wear protective gloves. Recommendations are listed below. Other protective material may be used, depending on the situation, if adequate degradation and permeation data is available. If other chemicals are used in conjunction with this chemical, material selection should be based on protection for all chemicals present.

<table>
<thead>
<tr>
<th>Suitable material</th>
<th>butyl-rubber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>according to EN 374: level 6</td>
</tr>
<tr>
<td>Glove thickness</td>
<td>approx 0.3 mm</td>
</tr>
<tr>
<td>Break through time</td>
<td>&gt; 480 min</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Suitable material</th>
<th>polyvinylchloride / nitrile rubber</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>according to EN 374: level 4</td>
</tr>
<tr>
<td>Glove thickness</td>
<td>approx 0.9 mm</td>
</tr>
<tr>
<td>Break through time</td>
<td>approx 120 min</td>
</tr>
</tbody>
</table>

Skin and body protection
Impervious clothing. Wear face-shield and protective suit for abnormal processing problems.

Respiratory protection
Respirator with A filter. Full mask with above mentioned filter according to producers using requirements or self-contained breathing apparatus. Equipment should conform to EN 136 or EN 140 and EN 143.

Environmental exposure controls
If possible use in closed systems. If leakage can not be prevented, the substance needs to be suck off at the emersion point, if possible without danger. Observe the exposure limits, clean exhaust air if needed. If recycling is not practicable, dispose of in compliance with local regulations. Inform the responsible authorities in case of leakage into the atmosphere, or of entry into waterways, soil or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>colourless</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>unpleasant</td>
<td></td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Melting point/range</td>
<td>-21.5 °C</td>
<td></td>
</tr>
<tr>
<td>Boiling point/range</td>
<td>141 °C @ 1013 hPa</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>50.5 °C</td>
<td>DIN 51755</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Does not apply,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the substance is a liquid</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>2.1 Vol %</td>
<td></td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>12 Vol %</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vapour pressure Values</th>
<th>Vapour pressure Values</th>
<th>Vapour pressure Values</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>[hPa] 4.0</td>
<td>[kPa] 0.40</td>
<td>[atm] 0.004</td>
<td>@ °C 23</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>2.2</td>
<td>0.022</td>
</tr>
</tbody>
</table>

| Vapour density         | 2.6 (Air = 1) @ 20 °C (68 °F) |

<table>
<thead>
<tr>
<th>Relative density Values</th>
<th>@ °C</th>
<th>@ °F</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.99</td>
<td>20</td>
<td>68</td>
</tr>
</tbody>
</table>

| Solubility              | completely miscible, in water |           |
log Pow 0.33 (measured)
Autoignition temperature 440 °C
   Method DIN 51794
Decomposition temperature No data available
Viscosity 1.175 mPa*s @ 15 °C
Explosive properties Does not apply, substance is not explosive. There are no chemical groups associated with explosive properties
Oxidizing properties Does not apply, substance is not oxidising. There are no chemical groups associated with oxidizing properties

9.2. Other information
Molecular weight 74.08
Molecular formula C3 H6 O2
Refractive index 1.387 @ 20 °C

SECTION 10: Stability and Reactivity

10.1. Reactivity
The reactivity of the product corresponds to the typical reactivity shown by the substance group as described in any text book on organic chemistry.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
Vapour/air-mixtures are explosive at intense warming.

10.4. Conditions to avoid
Avoid contact with heat, sparks, open flame and static discharge. Avoid any source of ignition.

10.5. Incompatible materials
bases, amines, strong oxidizing agents.

10.6. Hazardous decomposition products
No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Likely routes of exposure Ingestion, Inhalation, Eye contact, Skin contact

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th>Endpoint</th>
<th>Values</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propionic acid (79-09-4)</td>
<td>Oral</td>
<td>LD50</td>
<td>3455 mg/kg</td>
<td>rat, male/female</td>
</tr>
<tr>
<td></td>
<td>Inhalative</td>
<td>LC50</td>
<td>&gt; 19.7 mg/l (1 h)</td>
<td>rat, male/female</td>
</tr>
</tbody>
</table>
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Propionic acid, CAS: 79-09-4

Assessment
Based on available data, the classification criteria are not met for:
- Acute oral toxicity
- Acute inhalation toxicity
- STOT SE

Dermal acute toxicity data were not determined, because of the corrosive properties of the substance.

Irritation and corrosion

<table>
<thead>
<tr>
<th>Propionic acid (79-09-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Organ Effects</td>
</tr>
<tr>
<td>Skin</td>
</tr>
<tr>
<td>Eyes</td>
</tr>
</tbody>
</table>

Propionic acid, CAS: 79-09-4

Assessment
The available data lead to the classification given in section 2
For respiratory irritation, no data are available

Sensitization

<table>
<thead>
<tr>
<th>Propionic acid (79-09-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Organ Effects</td>
</tr>
<tr>
<td>Skin</td>
</tr>
</tbody>
</table>

Propionic acid, CAS: 79-09-4

Assessment
Based on available data, the classification criteria are not met for:
Skin sensitization
For respiratory sensitization, no data are available

Subacute, subchronic and prolonged toxicity

<table>
<thead>
<tr>
<th>Propionic acid (79-09-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
</tr>
<tr>
<td>Subchronic toxicity</td>
</tr>
<tr>
<td>Subchronic toxicity</td>
</tr>
<tr>
<td>Subchronic toxicity</td>
</tr>
</tbody>
</table>

Propionic acid, CAS: 79-09-4

Assessment
Based on available data, the classification criteria are not met for:
STOT RE

Carcinogenicity, Mutagenicity, Reproductive toxicity

<table>
<thead>
<tr>
<th>Propionic acid (79-09-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
</tr>
<tr>
<td>Mutagenicity</td>
</tr>
<tr>
<td>Mutagenicity</td>
</tr>
<tr>
<td>Carcinogenicity</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Carcinogenicity</th>
<th>NOAEL: 4000 ppm</th>
<th>rat</th>
<th>Oral</th>
<th>systemic effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental Toxicity</td>
<td>NOAEL 300 mg/kg/d</td>
<td>rat</td>
<td>OECD 414, Oral Maternal toxicity</td>
<td>Teratogenicity read across</td>
</tr>
</tbody>
</table>

**Propanic acid, CAS: 79-09-4**

**CMR Classification**
The available data on CMR properties are summarized in the table above. They do not indicate a classification into categories 1A or 1B

**Evaluation**
In vitro tests did not show mutagenic effects

**Propanic acid, CAS: 79-09-4**

**Main symptoms**
cough, shortness of breath, abdominal pain, nausea, vomiting, circulatory collapse.

**Target Organ Systemic Toxicant - Single exposure**
Based on available data, the classification criteria are not met for:
STOT SE

**Target Organ Systemic Toxicant - Repeated exposure**
Based on available data, the classification criteria are not met for:
STOT RE

**Aspiration toxicity**
no data available

**Note**
Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

**12.1. Toxicity**

**Acute aquatic toxicity**

<table>
<thead>
<tr>
<th>Propionic acid (79-09-4)</th>
<th>Exposure time</th>
<th>Dose</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leucasics idus (Golden orfe)</td>
<td>96h</td>
<td>LC50: &gt; 10000 mg/l</td>
<td>DIN 38412, part 15</td>
</tr>
<tr>
<td>Daphnia magna (Water flea)</td>
<td>48h</td>
<td>EC50: &gt; 500 mg/l</td>
<td>84/449/EEC C.2</td>
</tr>
<tr>
<td>Desmodesmus subspicatus</td>
<td>72h</td>
<td>EC50: &gt; 500 mg/l (Biomass)</td>
<td>OECD 201</td>
</tr>
<tr>
<td>Activated sludge (domestic)</td>
<td>30 min</td>
<td>EC20: 1040 mg/l</td>
<td>ISO 8192 Respiration rate</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

**Propionic acid, CAS: 79-09-4**

**Biodegradation**
95 % (10 d), aerobic, activated sludge, industrial, OECD 302 B (Zahn-Wellens Test).

**12.3. Bioaccumulative potential**

<table>
<thead>
<tr>
<th>Propionic acid (79-09-4)</th>
<th>Type</th>
<th>Result</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>log Pow***</td>
<td>0.33***</td>
<td>measured***</td>
<td></td>
</tr>
</tbody>
</table>
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12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Propionic acid (79-09-4)</th>
<th>Result</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>no data available***</td>
<td></td>
</tr>
</tbody>
</table>

12.5. Results of PBT and vPvB assessment

Propionic acid, CAS: 79-09-4
PBT and vPvB assessment
This substance is not considered to be persistent, bioaccumulating nor toxic (PBT), nor very persistent nor very bioaccumulating (vPvB)

12.6. Other adverse effects

Propionic acid, CAS: 79-09-4
No data available

Note
Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product Information
Disposal required in compliance with all waste management related state and local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and possibilities for disposal.
Hazardous waste according to European Waste Catalogue (EWC)

Uncleaned empty packaging
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

SECTION 14: Transport information

ADR/RID

14.1. UN number      UN 3463
14.2. UN proper shipping name  Propionic acid
14.3. Transport hazard class(es)  8
Subsidiary Risk  3
14.4. Packing group  II
14.5. Environmental hazards  no
14.6. Special precautions for user
  ADR Tunnel restriction code  (D/E)
  Classification Code  CF1
  Hazard Number  83
## SAFETY DATA SHEET

### Propionic acid AF

**Version / Revision** 4.00

---

### ADN

<table>
<thead>
<tr>
<th>14.1. UN number</th>
<th>UN 3463</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Propionic acid</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>8</td>
</tr>
<tr>
<td>Subsidiary Risk</td>
<td>3</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>II</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>no</td>
</tr>
<tr>
<td>14.6. Special precautions for user</td>
<td>Classification Code CF1, Hazard Number 83</td>
</tr>
</tbody>
</table>

### ICAO-TI / IATA-DGR

<table>
<thead>
<tr>
<th>14.1. UN number</th>
<th>UN 3463</th>
</tr>
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<tbody>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Propionic acid</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>8</td>
</tr>
<tr>
<td>Subsidiary Risk</td>
<td>3</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>II</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
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</tr>
<tr>
<td>14.6. Special precautions for user</td>
<td>no data available</td>
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### IMDG

<table>
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<tr>
<th>14.1. UN number</th>
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<tr>
<td>14.2. UN proper shipping name</td>
<td>Propionic acid</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
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</tr>
<tr>
<td>14.4. Packing group</td>
<td>II</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>no</td>
</tr>
<tr>
<td>14.6. Special precautions for user</td>
<td>EmS F-E, S-C</td>
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</table>

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

<table>
<thead>
<tr>
<th>Product name</th>
<th>Propionic acid</th>
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<td>Ship type</td>
<td>3</td>
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<tr>
<td>Pollution category</td>
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</table>

### SECTION 15: Regulatory information

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

**Regulation 1272/2008, Annex VI**

**Propionic acid, CAS: 79-09-4**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Skin Corr. 1B; H314</th>
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<tbody>
<tr>
<td>Hazard pictograms</td>
<td>GHS05 Corrosion***</td>
</tr>
<tr>
<td>Signal word</td>
<td>Danger</td>
</tr>
</tbody>
</table>

---

12 / 14 Great Britain (E-GB) /EN
Hazard statements

H314

DI 2012/18/EU (Seveso III)
Category
Annex I, part 1: P5a - c; depending on conditions

DI 1999/13/EC (VOC Guideline)

<table>
<thead>
<tr>
<th>Component</th>
<th>Status</th>
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<tbody>
<tr>
<td>Propionic acid</td>
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<td>CAS: 79-09-4</td>
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</tr>
</tbody>
</table>

International Inventories

Propionic acid, CAS: 79-09-4
AICS (AU)
DSL (CA)
IECSC (CN)
EC-No. 2011763 (EU)
ENCS (2)-602 (JP)
ISHL (2)-602 (JP)
KECI KE-29352 (KR)
INSQ (MX)
PICCS (PH)
TSCA (US)
NZIoC (NZ)
TCSI (TW)

National regulatory information Great Britain

This classification following EG guidelines is also in accordance with the Chemicals (Hazard Information and Packaging for Supply) Regulation CHIP (as amended).

Releases to air (Pollution Inventory Substances)
not subject

Releases to water (Pollution Inventory Substances)
not subject

Releases to sewer (Pollution Inventory Substances)
not subject
For details and further information please refer to the original regulation

15.2. Chemical safety assessment

The Chemical Safety Report (CSR) is not required.

SECTION 16: Other information
Full text of H-Statements referred to under sections 2 and 3
H226: Flammable liquid and vapour.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

Abbreviations
A table of terms and abbreviations can be found under the following link:

Training advice
For effective first-aid, special training / education is needed.

Sources of key data used to compile the datasheet
Information contained in this safety data sheet is based on Oxea owned data and public sources deemed valid or acceptable. The absence of data elements required by OSHA, ANSI or Annex II, Regulation 1907/2006/EC indicates, that no data meeting these requirements is available.

Further information for the safety data sheet
Changes against the previous version are marked by ***. Observe national and local legal requirements. For more information, other material safety data sheets or technical data sheets please consult the Oxea homepage (www.oxea-chemicals.com).
The annex is not required because this material is exempted from REACh

Disclaimer
For industrial use only. The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Oxea makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.

End of Safety Data Sheet