1. Substance/preparation and company identification

Librel® Fe-DP

Use: Micronutrient

Manufacturer/supplier:
BASF Australia Limited (ABN 62 008 437 867)
Level 12, 28 Freshwater Place Southbank
Victoria 3006, AUSTRALIA
Telephone: +61 3 8855-6600
Telefax number: +61 3 8855-6511

Emergency information:
BASF Emergency Advice Number: 1800 803 440 (24h) [within Australia]
BASF Emergency Advice Number: + 61 3 8855 6666 [outside Australia]

2. Hazard identification

The product does not require a hazard warning label in accordance with EC Directives.

NON-HAZARDOUS SUBSTANCE, NON-DANGEROUS GOODS

3. Composition/information on ingredients

Chemical nature
4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:
Wash thoroughly with soap and water.

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Rinse mouth and then drink plenty of water.

Note to physician:
Symptoms: No significant symptoms are expected due to the non-classification of the product. Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:
dry powder, carbon dioxide, foam, water spray

Unsuitable extinguishing media for safety reasons:
water jet

Specific hazards:
nitrogen oxides, carbon oxides

Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.
6. Accidental Release Measures

Personal precautions:
Avoid dust formation. Use personal protective clothing. Information regarding personal protective measures see, section 8.

Environmental precautions:
Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:
For small amounts: Pick up with suitable appliance and dispose of.
For large amounts: Contain with dust binding material and dispose of. Avoid raising dust.

7. Handling and Storage

Handling
Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection against fire and explosion:
Avoid dust formation. Take precautionary measures against static discharges.

Dust explosion class: none.

Storage
Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

8. Exposure controls and personal protection

Components with occupational exposure limits

Sulfuric acid, iron(3+) salt (3:2), 10028-22-5;
TWA value 1 mg/m3 (OEL (AU))
Measured as: iron (Fe)

Personal protective equipment

Respiratory protection:
Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with high efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P3 or FFP3).

Hand protection:
Chemical resistant protective gloves
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):
e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
Safety glasses with side-shields.

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>free flowing fine granules</td>
</tr>
<tr>
<td>Colour</td>
<td>orange</td>
</tr>
<tr>
<td>Odour</td>
<td>mild</td>
</tr>
<tr>
<td>pH value</td>
<td>4 - 7 (20 g/l)</td>
</tr>
<tr>
<td>Melting point</td>
<td>The substance / product decomposes therefore not determined.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>not readily ignited</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>not applicable</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>not applicable</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>&gt; 500 °C (BAM)</td>
</tr>
<tr>
<td>Self ignition</td>
<td>not self-igniting</td>
</tr>
<tr>
<td>Explosion hazard</td>
<td>not applicable</td>
</tr>
<tr>
<td>Fire promoting properties</td>
<td>not fire-propagating</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt; 0.000001 hPa (25 °C)</td>
</tr>
<tr>
<td>Bulk density</td>
<td>600 - 900 kg/m3</td>
</tr>
</tbody>
</table>
Solubility in water: approx. 150 g/l (20 °C)
Partitioning coefficient n-octanol/water (log Pow): -8.841 (25 °C) (calculated)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Viscosity, dynamic: not applicable

10. Stability and Reactivity

Conditions to avoid:
Avoid extreme temperatures.

Substances to avoid:
strong oxidizing agents, strong bases, strong acids

Hazardous reactions:
The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion.

LD50 rat (oral): > 2,000 mg/kg

Irritation

Assessment of irritating effects:
Not irritating to eyes and skin.

Sensitization

Assessment of sensitization:
There is no evidence of a skin-sensitizing potential.

Other relevant toxicity information

The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.
12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms.

Toxicity to fish:
LC50 > 100 mg/l

Mobility

Assessment transport between environmental compartments:
No data available.

Persistence and degradability

Assessment biodegradation and elimination (H2O):
The product can be virtually eliminated from water by abiotic processes e.g. adsorption onto activated sludge.

Bioaccumulation potential

Bioaccumulation potential:
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

The product has not been tested. The statements on ecotoxicology have been derived from products of a similar structure and composition.

13. Disposal Considerations

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:
Uncontaminated packaging can be re-used.
Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14. Transport Information

Domestic transport:
Not classified as a dangerous good under transport regulations

Sea transport
15. Regulatory Information

Poisons Schedule: Not scheduled

**Regulations of the European union (Labelling)**

as in Annex VI of Directive 67/548/EEC:

The product is classified and labelled in accordance with EC Directives.

**Other regulations**

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

**Registration status:**

AICS, AU released / listed

16. Other Information

Due to the merger of CIBA and BASF Group all Material Safety Data Sheets have been reassessed on the basis of consolidated information. This may have resulted in changes of the Material Safety Data Sheets. In case you have questions concerning such changes please contact us at the address mentioned in Section I.

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product’s properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.