GPS Safety Summary
FeNaEDDHA

Chemical Identity

Name: FeNaEDDHA

CAS number: 84539-55-9

Molecular formula: not applicable (UVCB substance)

Structure: not applicable (UVCB substance)

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IUPAC name:
Acetic acid, oxo-, sodium salt, reaction products with ethylenediamine and phenol, iron sodium salts

BASF brand names:
Libfer SP
Chaufer

For synonyms see end of document

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Product Uses

FeNaEDDHA is used as micronutrient fertilizer in field, glasshouse and hydroponic cultures.

Benefits

FeNaEDDHA is extremely stable to ensure iron remains available to crops even in highly alkaline calcareous soils to correct iron deficiencies (e. g. iron chlorosis).
Health Information

Human Health Safety Assessment

Note: The information contained in the table below may be useful to someone handling the concentrated substance such as a manufacturer or transporter. Consumers are not likely to come in contact with the concentrated substance. The data, while verifiable, are not intended to be comprehensive nor replace the data found in the (M)SDS.

<table>
<thead>
<tr>
<th>Effect Assessment</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity</td>
<td>Virtually nontoxic after single ingestion, short-term skin contact and short-term inhalation.</td>
</tr>
<tr>
<td>Irritation</td>
<td>Not irritating to skin and eyes.</td>
</tr>
<tr>
<td>Sensitization</td>
<td>Animal studies do not exclude a sensitizing potential. Human data not available. Not classified as sensitizing after skin contact.</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>Not mutagenic in bacteria and mammalian cell culture.</td>
</tr>
<tr>
<td>Toxicity after repeated exposure</td>
<td>Repeated oral, dermal or inhalative uptake of the substance did not cause substance-related effects.</td>
</tr>
<tr>
<td>Toxicity for reproduction</td>
<td>Animal studies gave no indication of a fertility impairing effect at doses which were not toxic to the parental animals. This statement has been derived from substances of a similar structure or composition. Animal studies gave no indication of a developmental toxic effect at doses which were not toxic to the parental animals.</td>
</tr>
</tbody>
</table>

Environmental Information

Environment Safety Assessment

Note: The information in this chapter is intended to provide brief and general information of this substance’s environmental impact. The results in the table below refer to testing performed with the concentrated substance. The data contained in this section explain the relative effect of the concentrated substance on the environment, as defined by certain tests.

<table>
<thead>
<tr>
<th>Effect Assessment</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Toxicity</td>
<td>With high probability not harmful to aquatic organisms.</td>
</tr>
<tr>
<td>Persistence and degradability</td>
<td>Poorly biodegradable.</td>
</tr>
<tr>
<td>Bioaccumulation potential</td>
<td>Significant accumulation in organisms is not to be expected.</td>
</tr>
</tbody>
</table>
Physical/Chemical Properties

Phys/Chem Safety Assessment

- FeNaEDDHA is a complex mixture of several single substances. It is a fine grained, free flowing, homogeneous solid. FeNaEDDHA is soluble in water and is not flammable.

Note: The results in the table below refer to testing performed with the concentrated substance. It is not intended to be comprehensive or to replace information found in the (M)SDS.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Melting / freezing point</td>
<td>&gt; 500 °C at (at atmospheric pressure)</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not relevant for solids</td>
</tr>
<tr>
<td>Flammability</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Non explosive</td>
</tr>
<tr>
<td>Self-ignition temperature</td>
<td>331 °C (at atmospheric pressure)</td>
</tr>
</tbody>
</table>

Exposure Potential

- **Workplace exposure**: Based on the very low toxicity of FeNaEDDHA an exposure assessment is not considered necessary. FeNaEDDHA released during manufacturing or handling is of no concern for the health of workers since it does not induce any adverse effects at relevant doses.

- **Consumer exposure**: There is no intended use of FeNaEDDHA in consumer products. Therefore, a health hazard due to exposure for the consumer is negligible.

- **Environmental exposure**: FeNaEDDHA powder is used as fertilizer in field, glasshouse and hydroponic cultures. It is not harmful to aquatic organisms and does not accumulate in the food chain. Conclusively, all identified uses are safe for the environment based on the scientific facts summarized above and when carried out in compliance with recommended risk management measures and applicable regulations.
Recommended Handling Measures

The recommended safety measures generally apply in contact with the concentrated substance. It is NOT intended to replace the comprehensive guidance found in the (M)SDS, only supplement it. Please refer to the (M)SDS for specific safety and first aid measures.

When using concentrated chemicals always make sure that there is adequate ventilation. Always use appropriate chemical resistant gloves to protect your hands and skin and always wear eye protection such as chemical goggles. Do not eat, drink, or smoke where chemicals are handled, processed, or stored. Wash hands and skin following contact. If the substance gets into your eyes, rinse eyes thoroughly for at least 15 minutes with tap water and seek medical attention. For specific advice please consult the corresponding (Material) Safety Data Sheet of the substance.

All effluent releases that may include the substance must be directed to a (municipal) waste water treatment plant that removes the substance from the final releases to the receiving water.

Regulatory Information / Classification and Labelling

Under GHS substances are classified according to their physical, health, and environmental hazards. The hazards are communicated via specific labels and the (M)SDS. GHS attempts to standardize hazard communication so that the intended audience (workers, consumers, transport workers, and emergency responders) can better understand the hazards of the chemicals in use.

Note: The hazard statements and symbols presented here refer to the hazard properties of the concentrated substance and are meant to provide a brief overview of the substance’s labelling. It is not intended to be comprehensive or to replace information found in the (M)SDS.

Labeling according to UN GHS
UN GHS is the basis for country specific GHS labeling

Based on available data, no labeling is currently required.

Additional information
1. IFA GESTIS-database on hazardous substances
   http://www.dguv.de/ifa/en/gestis/stoffdb/index.jsp

**Most commonly used synonyms**

» FeNaEDDHA

**Disclaimer**

This Product Safety Summary is intended to provide a general overview of the chemical substance. It contains basic information and is not intended to provide emergency response information, medical information or treatment information. The summary cannot be relied on to provide in-depth safety and health information. In-depth safety and health information must be obtained from the Material Safety Data Sheet ((M)SDS) for the chemical substance.

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**Contact**

For further information on this substance or GPS safety summaries in general, please contact:

info.gps@basf.com