GPS Safety Summary
Bentonite, acid-leached

Chemical Identity

Name: Bentonite, acid-leached

CAS number: 70131-50-9

Molecular formula: unspecified for this UVCB substance

Structure

IUPAC name:
Bentonite, acid-leached

BASF brand names:
Cedesorb™
F-200
F-220
F-24 series
Hydrocol®
Novasil Plus
Organosorb®
Telioform®

For synonyms see end of document

Product Uses

Bentonite, acid-leached is a UVCB (unknown or variable composition, or of biological origin) substance which can be identified by its origin (bentonite) and its process (acid-leaching). Bentonite originates from a natural deposit of clay minerals from the smectite group, the most common form in geological terms being montmorillonite. It is used in industrial/professional as well as consumer settings. Its main applications include: agents adsorbing and absorbing gases or liquids, binding agents, fertilizers, fillers, intermediates, lubricants and lubricant additives, pH-regulating agents, bleaching agents, filter aids, separation medium, water treatment chemicals and as catalysts.
Benefits

Activated Bentonite (Mineral/Clay) Adsorbents
For purification of aromatic streams such as benzene, toluene and xylene (BTX), or cumene, F-Series acid-activated adsorbents offer the longest life span for removing olefin and nitrogen - key to preventing unplanned shutdowns. BASF provides a portfolio of aromatic solutions, including F-24, the industry standard, which enables companies to:
- Dictate moisture levels according to specific needs
- Utilize well-proven activation technology (H2SO4) to ensure the highest performance
- Ensure superior water stability to withstand process disturbances
- Accommodate a range of operational requirements: high pressure drop, high selectivity or maximum cycle length
- Assure maximum value for products sold as feedstock for petrochemical, specialty chemicals and resin production

Cedesorb® - bentonite clay for high production efficiency
Cedesorb® is a well-established range of bentonite clays specifically designed to improve paper machine production efficiency while optimizing paper quality. Cedesorb® can be used to passify detrimental substances, leading to superior paper machine cleanliness.

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 a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.</td>
</tr>
<tr>
<td>Irritation</td>
<td>Not irritating to the skin. Not irritating to the eyes.</td>
</tr>
<tr>
<td>Sensitization</td>
<td>Skin sensitizing effects were not observed in animal studies.</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The product has not been tested. The statement has been derived from products of similar structure or composition.</td>
</tr>
</tbody>
</table>
Toxicity after repeated exposure

The whole of the information available provides no indication of a toxic effect after repeated exposure. The product has not been tested. The statement has been derived from products of similar structure or composition.

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 acutely not harmful to aquatic organisms.</td>
</tr>
<tr>
<td>Persistence and degradability</td>
<td>Inorganic substance, therefore biodegradation testing is not applicable.</td>
</tr>
<tr>
<td>Bioaccumulation potential</td>
<td>Accumulation in organisms is not to be expected.</td>
</tr>
</tbody>
</table>

Physical/Chemical Properties

Phys/Chem Safety Assessment

➢ Bentonite, acid-leached is an off-white inorganic solid which does not have flammable or explosive properties.

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; 450 °C at 1013 hPa</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not applicable. Melting point is above 300 °C.</td>
</tr>
</tbody>
</table>

Date of Issue: April 2012
<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>Not applicable</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>Non-combustible</td>
</tr>
</tbody>
</table>

**Exposure Potential**

- **Workplace exposure:** Based on the very low toxicity of Betonite, acid-leached exposure is considered to be without risk. Betonite, acid-leached 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. Nevertheless, workers should follow the recommended safety measures in the extended Safety Data Sheet (eSDS).

- **Consumer exposure:** Based on the very low toxicity of betonite, acid-leached exposure is considered to be without risk. Betonite, acid-leached released during handling is of no concern for the health of consumers since consumers will not come into contact with harmful levels of Betonite, acid-leached.

- **Environmental exposure:** Betonite, acid-leached has little toxic potential and is not expected to accumulate in organisms. Although the substance is not readily biodegradable it can be largely eliminated from the water body by abiotic processes, e.g. mechanical separation. Thus, the substance poses no unacceptable risk to the environment. 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 help immediately.
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 Labeling**

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 labeling. 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, labeling is currently not required.

**Additional information**

1. IFA GESTIS-database on hazardous substances  

2. Information on registered substance (ECHA)  

3. BASF Product finder  
Most commonly used synonyms

» Bentonite F2
» Bentonite F24
» Bentonite F100
» Bentonite F105

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