1. Substance/preparation and company identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

2. Composition/information on ingredients

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Content (W/W)</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>164462-16-2</td>
<td>&gt;= 82.0 - &lt;= 84.0 %</td>
<td>Alanine, N,N-bis(carboxymethyl)-, trisodium salt</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>&gt;= 13.0 - &lt;= 17.0 %</td>
<td>Water</td>
</tr>
<tr>
<td>1310-73-2</td>
<td>&gt;= 0.2 - &lt;= 2.0 %</td>
<td>Sodium Hydroxide</td>
</tr>
</tbody>
</table>

3. Hazard identification

Emergency overview
CAUTION: MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
INGESTION MAY CAUSE GASTRIC DISTURBANCES.
Wear chemical resistant protective gloves.
Avoid inhalation of dusts.
Wear safety glasses with side-shields.
Avoid contact with the skin, eyes and clothing.
Wear NIOSH-certified chemical goggles.
Ensure adequate ventilation.
Eye wash fountains and safety showers must be easily accessible.

Potential health effects
Primary routes of exposure
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

4. First-aid measures

General advice:
Immediately remove contaminated clothing.

If inhaled:
If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.
If on skin:
Wash affected areas thoroughly with soap and water. Seek medical attention.

If in eyes:
Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:
Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

**Note to physician**
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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### 5. Fire-fighting measures

**Flash point:** not applicable

**Suitable extinguishing media:**
dry extinguishing media, foam

**Unsuitable extinguishing media for safety reasons:**
carbon dioxide

**Additional information:**
Avoid whirling up the material/product because of the danger of dust explosion.

**Hazards during fire-fighting:**
harmful vapours
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

**Protective equipment for fire-fighting:**
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**Further information:**
Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

**NFPA Hazard codes:**
Health : 1  Fire: 1  Reactivity: 0  Special:

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### 6. Accidental release measures

**Personal precautions:**
Avoid dust formation. Use personal protective clothing.

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

**Cleanup:**
Avoid raising dust.

For small amounts: Pick up with suitable appliance and dispose of.
For large amounts: Contain with dust binding material and dispose of.
7. Handling and storage

Handling

General advice:
Closed containers should only be opened in well-ventilated areas.

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

Storage

General advice:
Keep container tightly closed and dry; store in a cool place.

8. Exposure controls and personal protection

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Sodium Hydroxide</th>
<th>OSHA</th>
<th>PEL</th>
<th>2 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACGIH</td>
<td>CLV</td>
<td>2 mg/m³</td>
</tr>
</tbody>
</table>

Advice on system design:
Provide adequate exhaust ventilation to control workplace concentrations.

Personal protective equipment

Respiratory protection:
Respiratory protection may not be required under normal operating conditions if adequate ventilation is provided.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Tightly fitting safety goggles (chemical goggles) and face shield.

Body protection:
Impermeable protective clothing

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Remove contaminated clothing. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>powder</td>
</tr>
<tr>
<td>Odour</td>
<td>faint odour</td>
</tr>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>pH value</td>
<td>11.5 - 12.5 (10 g/l)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>450.0 g/l (15 °C)</td>
</tr>
<tr>
<td>Miscibility with water</td>
<td>(15 °C) soluble</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Hazardous reactions:
The product may contain explosive fine dust or such dust may be produced by abrasion during transport or product transfer.
Decomposition products:
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

**Acute toxicity**

**Oral:**
LD50/rat: > 2,000 mg/kg

**Dermal:**
LD50/rat: > 2,000 mg/kg

**Skin irritation:**
rabbit: non-irritant

**Eye irritation:**
rabbit: non-irritant

12. Ecological information

**Environmental fate and transport**

**Biodegradation:**
- Test method: OECD 301 A (new version)
- Method of analysis: DOC reduction
- Degree of elimination: > 70 % (28 d)
- Test method: OECD 301F; ISO 9408; 92/69/EEC, C.4-D
- Method of analysis: BOD of COD
- Degree of elimination: > 80 % (28 d)
- Evaluation: Readily biodegradable (according to OECD criteria).

**Bioaccumulation:**
No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow).

**Environmental toxicity**

**Acute and prolonged toxicity to fish:**
zebra fish/LC50 (96 h): > 100 mg/l

**Acute toxicity to aquatic invertebrates:**
Daphnia sp./EC50 (48 h): > 100 mg/l

**Toxicity to microorganisms:**
Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

**Chronic toxicity to aquatic invertebrates:**
Daphnia sp. No observed effect concentration > 100 mg/l
13. Disposal considerations

**Waste disposal of substance:**
Do not discharge into drains/surface waters/groundwater.
Dispose of in accordance with national, state and local regulations.

**Container disposal:**
Dispose of in accordance with national, state and local regulations. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport information

**Land transport**
USDOT
Not classified as a dangerous good under transport regulations

**Sea transport**
IMDG
Not classified as a dangerous good under transport regulations

**Air transport**
IATA/ICAO
Not classified as a dangerous good under transport regulations

15. Regulatory information

**Federal Regulations**

**Registration status:**
TSCA, US released / listed

**OSHA hazard category:**
Not hazardous

**SARA hazard categories (EPCRA 311/312):**
Not hazardous

**SARA 313:**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>139-13-9</td>
<td>nitrilotriacetic</td>
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</tbody>
</table>

**State regulations**

**State RTK**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical name</th>
<th>State RTK</th>
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</thead>
<tbody>
<tr>
<td>1310-73-2</td>
<td>Sodium Hydroxide</td>
<td>MA, NJ, PA</td>
</tr>
</tbody>
</table>

16. Other information
HMIS III rating

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

Local contact information
prod_reg@basf.com

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