1. Product and Company Identification

Use: Raw material

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. Hazards Identification

Emergency overview
CAUTION:
PROLONGED OR REPEATED EXPOSURE MAY CAUSE LUNG DAMAGE.
Avoid inhalation of dusts.
Ensure adequate ventilation.

State of matter: solid
Colour: white
Odour: odourless

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.

Irritation / corrosion:
Exposure to dust or fume may cause irritation of the respiratory tract. Contact with the eyes or skin may cause mechanical irritation.

Chronic toxicity:

Repeated dose toxicity: Prolonged and repeated exposure may cause lung damage.

Medical conditions aggravated by overexposure:
Contact may aggravate pulmonary disorders.

Potential environmental effects
Aquatic toxicity:
The product has not been tested. It is a naturally occurring substance (e.g. in the metabolism of organisms), whose molecular structure is not supposed to have harmful effects.
3. 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>1332-58-7</td>
<td>&gt;= 90.0 - &lt;= 100.0 %</td>
<td>Kaolin</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>&gt;= 0.4 - &lt;= 2.0 %</td>
<td>Titanium dioxide</td>
</tr>
</tbody>
</table>

4. First-Aid Measures

If inhaled:
Keep patient calm, remove to fresh air. If breathing difficulties develop, aid in breathing and seek immediate medical attention.

If on skin:
Wash off thoroughly with ample water. Consult a doctor if skin irritation persists.

If in eyes:
In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If symptoms persist, seek medical advice.

If swallowed:
No hazards anticipated. If large quantities are ingested, seek medical advice.

5. Fire-Fighting Measures

Flash point: not applicable
Autoignition: not applicable
Self-ignition temperature: not self-igniting

Additional information:
Use extinguishing measures to suit surroundings.

Hazards during fire-fighting:
No particular hazards known.

Protective equipment for fire-fighting:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered.

6. Accidental release measures

Personal precautions:
Avoid dust formation. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment. Wear appropriate respiratory protection.

Environmental precautions:
Do not discharge into drains/surface waters/groundwater. Do not discharge substance/product into sewer system.
7. Handling and Storage

Handling

General advice:
Avoid dust formation. Product may present a nuisance dust hazard. Closed containers should only be opened in well-ventilated areas. Contaminated surfaces will be extremely slippery.

Protection against fire and explosion:
No special precautions necessary.

Storage

General advice:
Keep in a cool, well-ventilated place.

8. Exposure Controls and Personal Protection

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA PEL</th>
<th>Total dust</th>
<th>ACGIH TWA value</th>
<th>Respirable fraction</th>
<th>PEL 15 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium dioxide</td>
<td>15 mg/m³</td>
<td>Total dust</td>
<td>10 mg/m³</td>
<td>Respirable fraction</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Kaolin</td>
<td>10 mg/m³</td>
<td>Total dust</td>
<td>2 mg/m³</td>
<td>Respirable fraction</td>
<td>15 mg/m³</td>
</tr>
</tbody>
</table>

Personal protective equipment

Respiratory protection:
Wear appropriate certified respirator when exposure limits may be exceeded. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Eye protection:
Safety glasses with side-shields.

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form: powder
Odour: odourless
Colour: white
pH value: 3.0 - 6.0
Melting point: > 1,300 °C
Vapour pressure: not applicable
Density: 2.58 g/cm³
Bulk density: approx. 240 kg/m³
Particle size: approx. D90 2 µm
Solubility in water: insoluble
10. Stability and Reactivity

Conditions to avoid:
No conditions to avoid anticipated.

Substances to avoid:
No substances known that should be avoided.

Hazardous reactions:
The product is chemically stable.

11. Toxicological Information

Acute toxicity

*Information on: Kaolin*
Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from products of a similar structure or composition.

*Information on: Titanium dioxide*
Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Irritation / corrosion

Skin:
May cause mechanical irritation.

Result: non-irritant
Practical experience.

Eye:

Result: non-irritant
May cause mechanical irritation. Practical experience.

12. Ecological Information

Fish

*Information on: Kaolin*
Acute:
OECD 203; ISO 7346; 92/69/EEC, C.1 semistatic
Oncorhynchus mykiss/LC50 (96 h): > 100 mg/l
The product has not been tested. The statement has been derived from products of a similar structure or composition.

Aquatic invertebrates

*Information on: Kaolin*
Acute:
OECD Guideline 202, part 1 static
Daphnia magna/EC50 (48 h): > 1 mg/l
The product has not been tested. The statement has been derived from products of a similar structure or composition.

**Daphnia magna/LC50 (48 h):** > 1,100 mg/l

*Literature data.*

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**Aquatic plants**

*Information on: Kaolin*

**Toxicity to aquatic plants:**

OECD Guideline 201 static

**green algae/EC50 (72 h):** > 100 mg/l

The value meets the highest applied test concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

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**Degradability / Persistence**

**Biological / Abiological Degradation**

**Evaluation:**

Inorganic product which cannot be eliminated from water by biological purification processes. The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

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**13. Disposal considerations**

**Waste disposal of substance:**

Dispose of in accordance with local authority regulations. Do not discharge into waterways or sewer systems without proper authorization.

**RCRA:**

This product is not regulated by RCRA.

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**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

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**15. Regulatory Information**

**Federal Regulations**
16. Other Information

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

HMIS III rating
Health: 1¤  Flammability: 1  Physical hazard: 0

NFPA and HMIS use 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 extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

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MSDS Prepared by:
BASF NA Product Regulations
msds@basf.com
MSDS Prepared on: 2010/09/14

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