1. Substance/preparation and company identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932

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>14808-60-7</td>
<td>30.0 - 60.0 %</td>
<td>crystalline silica</td>
</tr>
<tr>
<td>65997-15-1</td>
<td>15.0 - 40.0 %</td>
<td>Cement, portland, chemicals</td>
</tr>
<tr>
<td>7778-18-9</td>
<td>10.0 - 30.0 %</td>
<td>Calcium sulphate</td>
</tr>
<tr>
<td>1309-37-1</td>
<td>1.0 - 5.0 %</td>
<td>Iron oxide</td>
</tr>
</tbody>
</table>

3. Hazard identification

Emergency overview

WARNING: CORROSIVE.
CONTAINS MATERIAL WHICH CAN CAUSE CANCER.
This product can contain a small amount of free respirable Crystalline (quartz) Silica which has been listed as a human carcinogen by NTP (Group 1) and IARC (Reasonably Anticipated to be a Human Carcinogen) and a Suspected Human Carcinogen by ACGIH (category A2).
MAY BE HARMFUL IF INHALED.
RISK OF SERIOUS DAMAGE TO EYES.
Irritating to eyes, respiratory system and skin.
In combination with water, repeated or prolonged dermal exposure can cause moderate to severe alkali burns.
Keep container tightly closed.
Avoid inhalation of dusts.
Avoid ingestion.
Avoid contact with the skin, eyes and clothing.
Wash thoroughly after handling.

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:
Information on: crystalline silica
Not irritating to the skin. The product has not been tested. The statement has been derived from products of a similar structure and composition. May cause slight irritation to the eyes.

Repeated dose toxicity:
Information on: Iron oxide
Chronic exposures have been known to produce pneumoconiosis (chronic inflammatory and fibrotic lung disease).
The substance may cause increase in lung mass and lung tissue changes after repeated inhalation.
The product has not been tested. The statement has been derived from products of a similar structure and composition.

Information on: crystalline silica
This product may contain greater than 0.1% crystalline silica.
Repeated exposure to high concentrations results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing, scarring of the lungs, and repeated, non-specific chest illnesses.

4. First-aid measures

General advice:
First aid personnel should pay attention to their own safety. Remove contaminated clothing.

If inhaled:
After inhalation of dust. Keep patient calm, remove to fresh air. If difficulties occur: Obtain medical attention.

If on skin:
After contact with skin, wash immediately with plenty of water and soap. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.

If in eyes:
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed:
Rinse mouth immediately and then drink plenty of water, seek medical attention. Do not induce vomiting unless told to by a poison control center or doctor.

5. Fire-fighting measures

Flash point: The substance/product is non-combustible.
Flammability: not flammable
Self-ignition temperature: not self-igniting

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

Unsuitable extinguishing media for safety reasons:
water jet

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

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. 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. Avoid contact with skin and eyes. Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

**Environmental precautions:**
No special precautions necessary.

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: Pick up with suitable appliance and dispose of. Pack in tightly closed containers for disposal.
For residues: Rinse with plenty of water.

7. Handling and storage

**Handling**

**General advice:**
Avoid dust formation. The Cement contained in this product reacts alkaline when in contact with water or humidity. This may cause severe irritation of skin or mucous membranes. The humidity of the skin or mucous membranes is enough for this reaction. Prolonged direct contact to the dry product should be avoided therefore. Avoid inhalation of dusts. Avoid skin contact. Pour downwind and allow as little free fall as possible while emptying bags into equipment. Breathing must be protected when large quantities are decanted without local exhaust ventilation.

**Protection against fire and explosion:**
No special precautions necessary.

**Storage**

**General advice:**
Containers should be stored tightly sealed in a dry place.

**Storage incompatibility:**

8. Exposure controls and personal protection

**Components with workplace control parameters**

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>crystalline silica</td>
<td>TWA value 2.4 millions of particles per cubic foot of air Respirable ; TWA value 0.1 mg/m³ Respirable ; TWA value 0.3 mg/m³ Total dust ;</td>
<td>TWA value 0.025 mg/m³ Respirable fraction</td>
</tr>
<tr>
<td>Cement, portland, chemicals</td>
<td>TWA value 5 mg/m³ Respirable fraction ; PEL 15 mg/m³ Total dust ;</td>
<td>TWA value 10 mg/m³</td>
</tr>
<tr>
<td>Calcium sulphate</td>
<td>TWA value 10 mg/m³ Inhalable fraction ;</td>
<td>TWA value 10 mg/m³ fumes/smoke</td>
</tr>
<tr>
<td>Iron oxide</td>
<td>TWA value 5 mg/m³ Respirable fraction ;</td>
<td>TWA value 5 mg/m³ Respirable fraction ;</td>
</tr>
</tbody>
</table>
Advice on system design:
Provide local exhaust ventilation to maintain recommended P.E.L.

Personal protective equipment
Hand protection:
Chemical resistant protective gloves, Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
Tightly fitting safety goggles (chemical goggles).

Body protection:
Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:
Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts. In order to prevent contamination while handling, closed working clothes and working gloves should be used. Handle in accordance with good building materials hygiene and safety practice. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Form</td>
<td>powder</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Colour</td>
<td>grey</td>
</tr>
<tr>
<td>pH value</td>
<td>miscible, alkaline</td>
</tr>
<tr>
<td>Melting point</td>
<td>&gt; 1,500 °C</td>
</tr>
<tr>
<td>Bulk density</td>
<td>1,800 - 2,400 kg/m³</td>
</tr>
<tr>
<td>n-octanol/water (log Pow)</td>
<td>The value has not be determined because the substance is inorganic.</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available.</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>miscible</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Conditions to avoid:
Avoid dust formation. Avoid humidity.

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

Hazardous reactions:
The product is stable if stored and handled as prescribed/indicated. Strong bases are formed on the addition of water.

Oxidizing properties:
Based on its structural properties the product is not classified as oxidizing.

11. Toxicological information

Acute toxicity
Oral:
LD50/ > 5,000 mg/kg
No systemic toxicity

Skin irritation:
Irritant.

Eye irritation:
Risk of serious damage to eyes.

Carcinogenicity:
Information on: crystalline silica
The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.

Experiences in humans:
Information on: crystalline silica
May cause silicosis.

12. Ecological information

Environmental fate and transport

Biodegradation:
Evaluation: Non-biodegradable.

Environmental toxicity

Other ecotoxicological advice:
Do not discharge product into the environment without control. Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. Do not release untreated into natural waters.

13. Disposal considerations

Waste disposal of substance:
Dispose of in accordance with local authority regulations.
Do not discharge into drains/surface waters/groundwater.

Container disposal:
Completely emptied packagings can be given for recycling.

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:
IARC 1, 2A or 2B carcinogen, NTP listed carcinogen, Chronic target organ effects reported, Acute target organ effects reported, OSHA PEL established, ACGIH TLV established, Skin and/or eye irritant

SARA hazard categories (EPCRA 311/312): Acute, Chronic

State regulations
State RTK

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CA Prop. 65:
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

16. Other information

HMIS III rating
Health: 2a  Flammability: 0  Physical hazard: 1

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.

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