

# Safety Data Sheet

## EMACO S88 CI

Revision date : 2012/07/09

Version: 2.0

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(30337743/SDS\_GEN\_US/EN)

### 1. Product and Company Identification

Company

BASF CORPORATION  
100 Park Avenue  
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP (4357)

### 2. Hazards Identification

Emergency overview

## WARNING:

MAY BE HARMFUL IF INHALED.

RISK OF SERIOUS DAMAGE TO EYES.

Can cause moderate irritation due to abrasive action.

In combination with water, repeated or prolonged dermal exposure can cause moderate to severe alkali burns.

CONTAINS MATERIAL WHICH CAN CAUSE CANCER.

Keep container tightly closed.

Avoid inhalation of dusts.

Avoid ingestion.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

State of matter: solid

Colour: dark grey

Odour: characteristic

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.

**Acute toxicity:**

Product may present a nuisance dust hazard. Inhalation of dust may cause respiratory tract irritation, coughing and breathing difficulties.

**Irritation / corrosion:**

Causes temporary irritation of the respiratory tract. Skin contact causes irritation. May cause severe damage to the eyes. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

**Sensitization:**

Chromate in this product has been reduced. Sensitization due to chromate within stated shelf-life is unlikely.

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### Chronic toxicity:

**Carcinogenicity:** Contains a known carcinogen. This product contains crystalline silica (quartz).

**Repeated dose toxicity:** Inhalation of dust may cause respiratory tract irritation, coughing and breathing difficulties.

**Teratogenicity:** The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

**Genotoxicity:** The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

### Signs and symptoms of overexposure:

Eye irritation, skin irritation, irritation of the mucous membranes

### Potential environmental effects

#### Aquatic toxicity:

The product gives rise to pH shifts.

#### Degradation / environmental fate:

Inorganic product which cannot be eliminated from water by biological purification processes. The product is slightly soluble in water. It can be largely eliminated from the water by abiotic processes, e.g. mechanical separation.

## 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
14808-60-7	40.0 - 70.0 %	crystalline silica
65997-15-1	15.0 - 40.0 %	Cement, portland, chemicals
1309-37-1	3.0 - 7.0 %	Iron oxide
1305-78-8	1.0 - 5.0 %	calcium oxide
112945-52-5	1.0 - 5.0 %	Silica
7778-18-9	1.0 - 5.0 %	Calcium sulphate
1309-48-4	0.5 - 1.5 %	magnesium oxide
1317-65-3	0.5 - 1.5 %	Limestone

## 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:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

### 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.

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### 5. Fire-Fighting Measures

Flash point: not applicable  
Flammability: does not ignite

**Suitable extinguishing media:**

foam, water spray, dry powder, carbon dioxide

**Unsuitable extinguishing media for safety reasons:**

water jet

**Additional information:**

Product itself is non-combustible. Only the packaging materials can catch fire. The extinguishing agents normally used are sufficient.

**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.  
Product is not combustible or explosive.

**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. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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### 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:**

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.

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### 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.

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### Storage

#### **General advice:**

Containers should be stored tightly sealed in a dry place.

#### **Storage incompatibility:**

General advice: Segregate from metals. Segregate from acids. Segregate from lyes. Segregate from oxidants. Segregate from foods and animal feeds.

## 8. Exposure Controls and Personal Protection

### Components with workplace control parameters

crystalline silica	OSHA	TWA value 2.4 millions of particles per cubic foot of air Respirable ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation. TWA value 0.1 mg/m3 Respirable ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation. TWA value 0.3 mg/m3 Total dust ; The value is calculated from a specified equation using a value of 100%. Lower values of % will give higher exposure limits. See regulation for specific equation.
Cement, portland, chemicals	ACGIH	TWA value 0.025 mg/m3 Respirable fraction ;
	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
	ACGIH	TWA value 1 mg/m3 Respirable fraction ; The value is for particulate matter containing no asbestos and <1% crystalline silica.
calcium oxide	OSHA	PEL 5 mg/m3 ;
Calcium sulphate	ACGIH	TWA value 2 mg/m3 ;
	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
magnesium oxide	ACGIH	TWA value 10 mg/m3 Inhalable fraction ;
	OSHA	PEL 15 mg/m3 Total particulate ;
Iron oxide	ACGIH	TWA value 10 mg/m3 Inhalable fraction ;
	OSHA	PEL 10 mg/m3 fumes/smoke ;
Limestone	ACGIH	TWA value 5 mg/m3 Respirable fraction ;
	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;

#### **Advice on system design:**

Provide local exhaust ventilation to maintain recommended P.E.L.

### Personal protective equipment

#### **Respiratory protection:**

Breathing protection if dusts are formed.

#### **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).

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### 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

Form:	powder	
Odour:	characteristic	
Colour:	dark grey	
pH value:	approx. 12 - 13	( 20 °C) (as aqueous suspension)
Melting temperature:	> 1,000 °C	
boiling temperature:		not applicable
Bulk density:	approx. 1,800 - 2,400 kg/m3	
Solubility in water:		( 20 °C) dispersible
Miscibility with water:		( 20 °C) not soluble
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

## 10. Stability and Reactivity

### Conditions to avoid:

Avoid dust formation. Avoid humidity.

### Substances to avoid:

strong acids  
strong bases, strong acids

### Hazardous reactions:

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

### Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

## 11. Toxicological information

### Irritation / corrosion

*Information on: Cement, portland, chemicals*

*Assessment of irritating effects:*

*Skin contact causes irritation. May cause severe damage to the eyes.*

### Repeated dose toxicity

*Information on: crystalline silica*

*Assessment of repeated dose toxicity:*

*Repeated inhalation exposure may affect certain organs. The substance may cause increase in lung mass and lung tissue changes after repeated inhalation.*

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*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.*

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### **Carcinogenicity**

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

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### **Experiences in humans:**

*Information on: crystalline silica*  
*May cause silicosis.*

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### **Other Information:**

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

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## **12. Ecological Information**

### **Degradability / Persistence** **Biological / Abiological Degradation**

Evaluation: Experience shows this product to be inert and non-degradable.

### **Bioaccumulation**

No data available concerning bioaccumulation.

### **Other adverse effects:**

Do not discharge product into the environment without control.

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## **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.

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## **14. Transport Information**

### **Land transport** USDOT

Not classified as a dangerous good under transport regulations

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### 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:

Chemical TSCA, US released / listed

This product contains an alkali metal nitrite which is subject to the SNUR at 40 CFR 721.4740 which prohibits the use of this product in metalworking fluids containing amines.

#### OSHA hazard category:

IARC 1, 2A or 2B carcinogen; NTP listed carcinogen; Chronic target organ effects reported; OSHA PEL established; ACGIH TLV established

#### EPCRA 311/312 (Hazard categories):

Acute; Chronic

### State regulations

#### State RTK

MA, NJ, PA  
MA, NJ, PA  
MA, NJ, PA  
MA, NJ, PA  
MA, PA  
MA, PA  
MA, NJ, PA

#### CAS Number

14808-60-7  
65997-15-1  
1309-37-1  
1305-78-8  
112945-52-5  
7778-18-9  
1309-48-4

#### Chemical name

crystalline silica  
Cement, portland, chemicals  
Iron oxide  
calcium oxide  
Silica  
Calcium sulphate  
magnesium oxide

#### 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: 2 $\frac{+}{-}$  Flammability: 0 Physical hazard: 1

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.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our

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products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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**MSDS Prepared by:**

BASF NA Product Regulations

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MSDS Prepared on: 2012/07/09

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