

# Safety data sheet

## EMACO R400 ARCH SPECIAL

Revision date : 2009/07/20  
Version: 1.0

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(30401037/SDS\_GEN\_US/EN)

### 1. Substance/preparation and company identification

Company  
BASF Construction Chemicals  
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

<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	10.0 - 30.0 %	Cement, portland, chemicals
65997-16-2	10.0 - 30.0 %	Cement, alumina, chemicals
1317-65-3	1.0 - 5.0 %	Limestone
1309-37-1	1.0 - 5.0 %	Iron oxide
7778-18-9	0.5 - 1.5 %	Calcium sulphate
13463-67-7	0.1 - 1.0 %	Titanium dioxide

### 3. Hazard identification

#### Emergency overview

WARNING: CONTAINS MATERIAL WHICH CAN CAUSE CANCER.  
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.  
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.

##### **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.*

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*The product has not been tested. The statement has been derived from products of a similar structure and composition.*

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### 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.

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### 5. Fire-fighting measures

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.

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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:**

No special precautions necessary.

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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:

General: 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 ; TWA value 0.1 mg/m <sup>3</sup> Respirable ; TWA value 0.3 mg/m <sup>3</sup> Total dust ;
Cement, portland, chemicals	ACGIH	TWA value 0.025 mg/m <sup>3</sup> Respirable fraction ;
	OSHA	PEL 5 mg/m <sup>3</sup> Respirable fraction ; PEL 15 mg/m <sup>3</sup> Total dust ;
Limestone	ACGIH	TWA value 10 mg/m <sup>3</sup> ;
	OSHA	PEL 5 mg/m <sup>3</sup> Respirable fraction ; PEL 15 mg/m <sup>3</sup> Total dust ;
Iron oxide	OSHA	PEL 10 mg/m <sup>3</sup> fumes/smoke ;
	ACGIH	TWA value 5 mg/m <sup>3</sup> Respirable fraction ;
Calcium sulphate	OSHA	PEL 5 mg/m <sup>3</sup> Respirable fraction ; PEL 15 mg/m <sup>3</sup> Total dust ;
	ACGIH	TWA value 10 mg/m <sup>3</sup> Inhalable fraction ;
Titanium dioxide	OSHA	PEL 15 mg/m <sup>3</sup> Total dust ;
	ACGIH	TWA value 10 mg/m <sup>3</sup> ;

#### 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.

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### 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

Form:	powder	
Odour:	odourless	
Colour:	grey	
Melting point:		Unspecified
Relative density:	2.2	
Bulk density:	1,800 - 2,400 kg/m <sup>3</sup>	
Viscosity, dynamic:		No data available.
Solubility in water:		not available

## 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:

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*Information on: crystalline silica*

*The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.*

*Information on: Titanium dioxide*

*IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).*

*In long-term studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed.*

*Tumors were only observed in rats after chronic inhalative exposure to high concentrations which caused sustained lung inflammation.*

*In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.*

*Dermal exposure is not expected to be carcinogenic.*

### **Experiences in humans:**

*Information on: crystalline silica*

*May cause silicosis.*

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## 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.

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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

### **Sea transport**

IMDG

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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

**Registration status:**

TSCA, US released / listed

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

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
5000 LBS	67-56-1	Methanol

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

#### State regulations

**State RTK**

<u>CAS Number</u>	<u>Chemical name</u>	<u>State RTK</u>
14808-60-7	crystalline silica	MA, NJ, PA
65997-15-1	Cement, portland, chemicals	MA, NJ, PA
1317-65-3	Limestone	MA, PA
1309-37-1	Iron oxide	MA, NJ, PA
7778-18-9	Calcium sulphate	MA, PA
13463-67-7	Titanium dioxide	MA, NJ, PA

**CA Prop. 65:**

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

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### 16. Other information

**HMIS III rating**

Health: 2      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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END OF DATA SHEET