



The Chemical Company

Safety Data Sheet

MASTERFLOW 928 GRT

Revision date : 2012/03/19
Version: 2.0

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(30367938/SDS_GEN_US/EN)

1. Product 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. Hazards Identification

Emergency overview

WARNING:
CONTAINS MATERIAL WHICH CAN CAUSE CANCER
MAY BE HARMFUL IF INHALED
Can cause moderate irritation due to abrasive action
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: grey
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.

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 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.

Chronic toxicity:

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Repeated dose toxicity: After repeated exposure the prominent effect is local irritation. The product has not been tested. The statement has been derived from the properties of the individual components.

Teratogenicity: The chemical structure does not suggest 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	>= 30.0 - <= 60.0 %	Cement, portland, chemicals
1305-78-8	>= 1.0 - <= 5.0 %	calcium oxide
112945-52-5	>= 1.0 - <= 5.0 %	Silica
13397-24-5	>= 1.0 - <= 5.0 %	Gypsum (Ca(SO ₄) 2H ₂ O)
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.

5. Fire-Fighting Measures

Flash point:

Non-flammable

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Flammability: does not ignite

Suitable extinguishing media:
foam, water spray, dry powder, 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

Product is not combustible or explosive. 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. 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.

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:

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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

Cement, portland, chemicals	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 ;
crystalline silica	ACGIH	TWA value 2 mg/m3 ;
	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 ;
Gypsum (Ca(SO4) 2H2O)	ACGIH	TWA value 2 mg/m3 ;
	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
Limestone	ACGIH	TWA value 10 mg/m3 Inhalable fraction ;
	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
Silica	OSHA	;
		listed TWA value 20 millions of particles per cubic foot of air ; TWA value 0.8 mg/m3 ; The exposure limit is calculated from the equation, $80/(\%SiO_2)$, using a value of 100% SiO2. Lower percentages of SiO2 will yield higher exposure limits.

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.

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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

Form:	powder	
Odour:	odourless	
Colour:	grey	
pH value:	approx. 12 - 13	(as aqueous suspension)
Melting point:		not applicable
Bulk density:	approx. 1,800 - 2,400 kg/m ³	
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Solubility in water:		(20 °C) dispersible
Miscibility with water:		(20 °C) not soluble

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.

Corrosion to metals:

No corrosive effect on metal

11. Toxicological information

Acute toxicity

Information on: calcium oxide

Assessment of acute toxicity:

The toxicity of the product is based on its corrosivity.

Of moderate toxicity after single ingestion.

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Irritation / corrosion

Information on: Cement, portland, chemicals

Assessment of irritating effects:

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

Information on: calcium oxide

Assessment of irritating effects:

Corrosive! Damages skin and 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.

NTP listed carcinogen

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.

12. Ecological Information

Degradability / Persistence Biological / Abiological Degradation

Evaluation:

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

Other adverse effects:

Do not discharge product into the environment without control.

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

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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

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

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
5000 LBS	91-22-5	quinoline
100 LBS	50-00-0; 75-56-9;	Formaldehyde; Propylene oxide; naphthalene
	91-20-3	

State regulations

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
MA, NJ, PA	14808-60-7	crystalline silica
MA, NJ, PA	65997-15-1	Cement, portland, chemicals
MA, NJ, PA	1305-78-8	calcium oxide
MA, PA	112945-52-5	Silica
NJ, PA	13397-24-5	Gypsum (Ca(SO4) 2H2O)

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: 1 \square 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 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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