

# Safety data sheet

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Safety data sheet

Date / Revised: 01.07.2020

Product: **MasterFlow 870**

Version: 5.0

(30362770/SDS\_GEN\_SG/EN)

## 1. Substance/preparation and manufacturer/supplier identification

### MasterFlow 870

Use: Product for construction chemicals

Manufacturer/supplier:

MB Solutions Singapore Pte Ltd  
1 Harbourfront Avenue #07-07/08  
Keppel Bay Tower  
Singapore 098632

Telephone: +65 6232 4899

Emergency telephone : : +1-813-248-0585

Telefax: +65 6589 8488

## 2. Hazard identification

Classification of the substance and mixture:

Skin corrosion/irritation: Cat. 2

Serious eye damage/eye irritation: Cat. 1

Specific target organ toxicity — single exposure: Cat. 3 (irritating to respiratory system)

Label elements and precautionary statement:

Pictogram:



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Signal Word:  
Danger

Hazard Statement:

| Causes serious eye damage. Causes skin irritation. May cause respiratory irritation.

Precautionary Statements (Prevention):

| Wear protective gloves and eye/face protection. Do not breathe dust. Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

| IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Storage):

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Precautionary Statements (Disposal):

Dispose of contents/container to hazardous or special waste collection point.

Other hazards which do not result in classification:

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

### 3. Composition/information on ingredients

#### Chemical nature

modified cement mortar

#### Hazardous ingredients

| calcium oxide

Content (W/W):  $\geq 1\%$  -  $< 3\%$

CAS Number: 1305-78-8

Skin Corr./Irrit.: Cat. 2

Eye Dam./Irrit.: Cat. 1

STOT SE: Cat. 3 (irr. to respiratory syst.)

Cement, portland, chemicals

Content (W/W):  $\geq 25\%$  -  $< 50\%$

CAS Number: 65997-15-1

Skin Corr./Irrit.: Cat. 2

Eye Dam./Irrit.: Cat. 1

STOT SE: Cat. 3 (irr. to respiratory syst.)

### 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.

**On skin contact:**

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.

**On contact with eyes:**

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

**On ingestion:**

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.

**Note to physician:**

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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## 5. Fire-Fighting Measures

**Additional information:**

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

**Specific hazards:**

Product is not combustible or explosive. No particular hazards known.

**Special protective equipment:**

Wear a self-contained breathing apparatus.

**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.

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Methods for cleaning up or taking up:  
Sweep/shovel up.

## 7. Handling and Storage

### Handling

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

Suitable materials for containers: tinned carbon steel (Tinplate), High density polyethylene (HDPE), Paper/Fibreboard  
Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

Protect from temperatures below: 5 °C  
Protect from temperatures above: 35 °C

## 8. Exposure controls and personal protection

### Components with occupational exposure limits

calcium oxide, 1305-78-8;  
TWA value 2 mg/m3 (ACGIHTLV)  
TWA value 2 mg/m3 (OEL (SG))

Limestone, 1317-65-3;  
TWA value 10 mg/m3 (OEL (SG))

Gypsum (Ca(SO<sub>4</sub>).2H<sub>2</sub>O), 13397-24-5;  
TWA value 10 mg/m3 (OEL (SG))  
TWA value 10 mg/m3 (ACGIHTLV), Inhalable fraction

Quartz (SiO<sub>2</sub>), 14808-60-7;  
TWA value 0.025 mg/m3 (ACGIHTLV), Respirable fraction  
TWA value 0.1 mg/m3 (OEL (SG)), Respirable dust

Cement, portland, chemicals, 65997-15-1;

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TWA value 1 mg/m<sup>3</sup> (ACGIHTLV), Respirable fraction  
The value is for particulate matter containing no asbestos and <1% crystalline silica.  
TWA value 10 mg/m<sup>3</sup> (OEL (SG))

Fumes, silica, 69012-64-2;  
TWA value 2 mg/m<sup>3</sup> (OEL (SG)), Respirable dust

Quartz (SiO<sub>2</sub>), 14808-60-7;  
TWA value 0.025 mg/m<sup>3</sup> (ACGIHTLV), Respirable fraction  
TWA value 0.1 mg/m<sup>3</sup> (OEL (SG)), Respirable dust

#### Personal protective equipment

Respiratory protection:  
Breathing protection if dusts are formed.

Hand protection:  
nitrile coated cotton gloves (e.g. EN 388, 374)

Eye protection:  
Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:  
Body protection must be chosen based on level of activity and exposure., light protective clothing

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). Contaminated equipment or clothing should be cleaned after each use or disposed of.

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## 9. Physical and Chemical Properties

Form: powder  
Colour: grey  
Odour: odourless  
Odour threshold: Not determined due to potential health hazard by inhalation.

pH value: approx. 11 - 13  
(approx. 20 °C)  
(as aqueous suspension)

Melting temperature: > 1,000 °C  
boiling temperature: not applicable

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Flash point: not applicable

Flammability (solid/gas): not flammable

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Explosion hazard: not explosive

Bulk density: approx. 1,800 - 2,400 kg/m<sup>3</sup>

Solubility in water: dispersible  
(15 °C)

Miscibility with water: (20 °C)  
not soluble

Hygroscopy: hygroscopic

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

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## 10. Stability and Reactivity

Conditions to avoid:  
See MSDS section 7 - Handling and storage.

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

Substances to avoid:  
strong bases, strong acids

Hazardous reactions:  
The product is stable if stored and handled as prescribed/indicated.

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

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## 11. Toxicological Information

### Acute toxicity

Assessment of acute toxicity:  
Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

### Irritation

Assessment of irritating effects:  
Skin contact causes irritation. May cause severe damage to the eyes.

Information on: Cement, portland, chemicals  
Experimental/calculated data:

| Skin corrosion/irritation rabbit: Irritant.  
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Information on: Cement, portland, chemicals

Experimental/calculated data:

| Serious eye damage/irritation rabbit: irreversible damage  
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### **Respiratory/Skin sensitization**

Assessment of sensitization:

| There is no evidence of a skin-sensitizing potential. The product has not been tested. The statement has been derived from the properties of the individual components.

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

### **Germ cell mutagenicity**

Assessment of mutagenicity:

| The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### **Carcinogenicity**

Assessment of carcinogenicity:

| The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### **Reproductive toxicity**

Assessment of reproduction toxicity:

| The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### **Developmental toxicity**

Assessment of teratogenicity:

| The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

### **Specific target organ toxicity (single exposure):**

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

### **Repeated dose toxicity and Specific target organ toxicity (repeated exposure)**

Assessment of repeated dose toxicity:

| No reliable data was available concerning repeated dose toxicity. Based on available Data, the classification criteria are not met.

### **Aspiration hazard**

| No aspiration hazard expected.

### **Other relevant toxicity 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 the properties of the individual components.

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## **12. Ecological Information**

### **Ecotoxicity**

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

| The product gives rise to pH shifts. Based on available Data, the classification criteria are not met.

### **Mobility**

Assessment transport between environmental compartments:

The substance will not evaporate into the atmosphere from the water surface.

Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

### **Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O):

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.

Not applicable for inorganic substances.

Elimination information:

| not determined

### **Bioaccumulation potential**

Assessment bioaccumulation potential:

The product will not be readily bioavailable due to its consistency and insolubility in water.

### **Additional information**

Other ecotoxicological advice:

| Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

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## **13. Disposal Considerations**

Observe national and local legal requirements.

Residues should be disposed of in the same manner as the substance/product.



Contaminated packaging:  
Completely emptied packagings can be given for recycling.

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## 14. Transport Information

### Domestic transport:

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

### Other regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

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## 16. Other Information

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Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.