



The Chemical Company

MATERIAL SAFETY DATA SHEET

According to NOHSC: 2011 (2003) and HSNO CoP 8-1 (September 2006)

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product name: RHEOMAC SF 100

Other name: None allocated

Recommended use: Strength and durability enhancing admixture for concrete

Supplier: BASF Construction Chemicals Australia Pty Ltd.
ABN 46 000 450 288
BASF New Zealand Ltd.

Address: 11 Stanton Road, Seven Hills, NSW, 2147 Australia
45 William Pickering Drive, Albany, Auckland, New Zealand

Telephone number: +61 2 8811 4200 +64 9 414 7233

Facsimile: +61 2 8811 3299 +64 9 414 7244

Emergency telephone number: 0417 658 263

2. HAZARDS IDENTIFICATION

Hazard classification: HAZARDOUS SUBSTANCE. NON DANGEROUS GOODS
Non Dangerous goods for transport according to the ADG code.
Hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and NOHSC.

Hazard Designation: Xi - Irritant.
Silica, Crystalline Quartz – Human Carcinogen

HSNO Classification

6.1E	Acutely toxic
6.3A	Irritating to the skin
6.4A	Irritating to the eye
6.9B	Harmful to human target organs and systems
8.3A	Corrosive to ocular tissue.

Risk phrase(s): R36/37/38 Irritating to eyes, respiratory system and skin.
R41 Risk of serious damage to eyes.
R48 Danger of serious health by prolonged exposure

Safety phrase(s): S22 Do not breathe dust
S24/25 Avoid contact with skin and eyes
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Proportion
Amorphous Silica (silica fume)	69012-64-2	>85.0%
Silica Crystalline Quartz	14808-60-7	<0.5%
Carbon	7440-44-0	<6.0%
Mixed metallic oxides	N/A	<10.0%

4. FIRST AID MEASURES

Inhalation: Avoid breathing dust. Use in well ventilated areas. If inhalation occurs, remove victim from exposure. If difficulty breathing, administer oxygen. If breathing stopped administer artificial respiration. Seek medical attention.

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<u>Eyes:</u>	While holding eyes open, gently flood with plenty of fresh water for 15 minutes. Seek medical attention. Skilled personnel should only undertake removal of contact lenses after an eye injury.
<u>Skin:</u>	Remove contaminated clothing. Remove excess from skin mechanically. Wash contacted areas thoroughly with soap and water. If irritation develops seek medical attention. Wash contaminated clothing before re-use.
<u>Ingestion:</u>	Not a normal route of injury. Do not induce vomiting; give large quantities of water; get immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquids into lungs. Do NOT give anything by mouth to an unconscious person.
<u>Advice to doctor:</u>	Treat symptomatically

5. FIRE FIGHTING MEASURES

<u>Suitable extinguishing media:</u>	As for surrounding fire.
<u>Hazards from combustion products:</u>	Not normally combustible.
<u>Precautions for fire fighters:</u>	As for surrounding fire.
<u>Hazchem code:</u>	None allocated.

6. ACCIDENTAL RELEASE MEASURES

<u>Methods & materials for containment & clean up:</u>	Spills should be carefully swept up and then shovelled into appropriately labelled containers. Disposal should be effected by an approved waste disposal organisation according to local regulations.
<u>Environmental precautions:</u>	Do not allow to enter into drains, sewers or waterways.

7. HANDLING AND STORAGE

<u>Precautions for safe handling:</u>	Wear personal protective equipment (PPE) as per Section 8. Provide for good ventilation. Avoid inhalation of dust. Avoid skin contact.
<u>Conditions for safe storage:</u>	Keep containers tightly closed; store under cool dry conditions. Keep out of reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Ventilation:</u>	Ensure adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particles below the OEL (Occupational Exposure Limit), suitable respiratory protection must be worn.
<u>Exposure Standards</u>	Silica, Crystalline - Quartz (14808-60-7) ES-TWA: 0.1 mg/m ³ (Silica Quartz, respirable, NOHSC) ES-TWA#: 0.1 mg/m ³ (QLD); 0.15 mg/m ³ (NSW) WES-TWA: 0.2 mg/m ³
<u>Personal Protective Equipment (PPE):</u>	
<u>Respiratory protection:</u>	At high dust levels, wear a Class P3 (Particulate) respirator or a Powered Air Purifying Respirator (PAPR) with Class P3 (Particulate) filter. Where an inhalation risk exists, wear a Class P1 (Particulate) Respirator.
<u>Glove type (AS2161):</u>	Impervious gloves e.g. PVC or nitrile rubber gauntlets.
<u>Eye protection:</u>	Chemical worker's goggles, well fitting safety glasses or full face shield.
<u>Clothing:</u>	No special clothing required but overalls or other suitable industrial clothing which

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provides full skin coverage are suggested as a general precaution, especially where heavy contamination is likely.

Other:

Use barrier creams to protect skin from contact with the material. Do not eat drink or smoke while working with the material. Always wash hands before smoking, eating, drinking or using the toilet and after finishing work. Observe the usual precautions when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Appearance:</u>	Grey, fine powder
<u>Odour:</u>	Odourless
<u>pH:</u>	Not applicable
<u>Explosion Limit:</u>	Not applicable
<u>Solubility in water:</u>	Insoluble.
<u>Specific gravity:</u>	ca 2.20
<u>Boiling/Melting point:</u>	> 1200 °C
<u>Flash point:</u>	Not applicable

10. STABILITY AND REACTIVITY

<u>Chemical stability:</u>	Normally stable when stored in original sealed containers in cool dry conditions. Not sensitive to mechanical impact.
<u>Incompatible materials:</u>	Acids and strong oxidisers. Hydrofluoric acid.
<u>Hazardous decomposition products:</u>	Product will not decompose into hazardous by-products and it will not polymerise
<u>Hazardous reactions:</u>	None known

11. TOXICOLOGICAL INFORMATION

<u>Health Hazard Summary:</u>	<p>This product contains trace levels of Crystalline (quartz) Silica which has been listed as a human carcinogen by NTP (Group1) and IARC (Human Carcinogen) and a Suspected Human Carcinogen by ACGIH (category A2). Repeated or prolonged over exposure to free, respirable Crystalline (quartz) Silica can cause silicosis (lung disease) or other delayed and serious lung injury.</p> <p>No significant exposure to respirable Crystalline (quartz) Silica is anticipated with the recommended use of this product.</p>
<u>Inhalation - Acute:</u>	Dust is mildly irritating to the nose, throat and respiratory tract and may cause coughing and sneezing. Pre-existing upper respiratory and lung diseases including asthma and bronchitis may be aggravated.
<u>Inhalation - Chronic:</u>	<p>Repeated exposure to product dust may result in increased nasal and respiratory secretions and coughing. Inflammation of lining tissue of the respiratory system may follow repeated exposure to high levels of dust with increased risk of bronchitis and pneumonia. Long-term occupational over-exposure to respirable crystalline silica dust at levels which exceed the NES (see above) can cause serious and irreversible lung disease, including bronchitis and silicosis (scarring of the lung). It may also increase the risk of other irreversible and serious disorders including scleroderma (a disease affecting the skin, joints, blood vessels and internal organs) and other autoimmune disorders.</p> <p>Inhalation of dust, including crystalline silica dust, is considered by medical authorities to increase the risk of lung disease due to tobacco smoking.</p>
<u>Eyes – Acute/Chronic:</u>	Dust is irritating to eyes. Exposure to dust may cause irritation and inflammation of the eyes and aggravate pre-existing eye conditions.
<u>Skin contact - Acute:</u>	Dust may be mildly irritating and drying to the skin due to its physical characteristics.

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<u>Skin contact – Chronic:</u>	Repeated heavy contact with the dust may cause drying of the skin and can result in skin rash (dermatitis) typically affecting the hands. Over time this may become chronic and can also become infected.
<u>Ingestion:</u>	Unlikely under normal industrial use. Mildly abrasive to mouth and throat if swallowed.
<u>Toxicity Data:</u>	Silica, Crystalline - Quartz (14808-60-7) Carcinogenicity: Classified as a Human Carcinogen by IARC and NTP (Group 1) Classified as a Suspected Human Carcinogen by ACGIH (category A2) Health Surveillance: Required [NOHSC:1005(1994)]

12. ECOLOGICAL INFORMATION

Ecology: Do not discharge into drains, sewers or waterways. Degradability not determined.

13. DISPOSAL CONSIDERATIONS

Disposal method and containers: Ensure containers are sealed. Avoid dust generation. Dispose of to an approved land fill site. Refer to local Waste Management Authority.

Special precautions (landfill/incineration): None known

14. TRANSPORT INFORMATION

UN number: None allocated

Proper shipping name: None allocated.

Dangerous goods class: None allocated

Subsidiary risk: None allocated

Packing group: None allocated

Hazchem code: None allocated

15. REGULATORY INFORMATION

NICNAS / AICS: All components are listed

Poisons Schedule: Not Scheduled

HSNO Classifications: 6.1E, 6.3A, 6.4A, 6.9B, 8.3A

ERMA Group Standard: HSR002544

ERMA / NZIoC: All components are listed

Tracking: Not required

Approved Handler: Not required

16. OTHER INFORMATION

Reason for issue: New product and brand name. Update to combined Australia and New Zealand MSDS.

This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request. All information contained in this MSDS is as accurate and up-to-date as possible. No warranty expressed or implied is made as to its accuracy, reliability or completeness.