

## MATERIAL SAFETY DATA SHEET

**Bridgeman Concrete** 1316 Omahu Rd PHONE +64 6 879 7256  
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*For 24 hour poisons advice, phone **0800 POISON**  
**0800 764766***

### IDENTIFICATION

PRODUCT RANGE: **Concrete**  
 GENERIC NAMES: **Ready Mixed Concrete, Pump Concrete, Shotcrete, Nofines Concrete, Kerbmix**  
 SUPPLIER: **Bridgeman Concrete**  
 MANUFACTURER: **Bridgeman Concrete**  
 PRODUCT USE: **Building and civil engineering construction**

### PHYSICAL DESCRIPTION / PROPERTIES

APPEARANCE: **Grey product which hardens**  
 BOILING POINT: **Not Relevant**  
 VAPOUR PRESSURE: **Not Relevant**  
 SPECIFIC GRAVITY: **(H2O=1) 2300-2400Kg/m<sup>2</sup>**  
 MELTING POINT: **Not applicable**  
 SOLUBILITY IN WATER: **Insoluble in hardened state**  
 PERCENT VOLATILE: **Not Relevant**  
 PH: **→12.0**

### COMPOSITION

CHEMICAL INGREDIENTS	CAS NUMBER	PROPORTION
Metal Oxides		3%-6%
Cement (Portland)	65997-15-1	10% -70%
Aggregates		10%- 90%
Chemical Additives (various)		0% - 5%

## HEALTH HAZARD INFORMATION

Health effects from hardened concrete will be from dust produced as a result of cutting, chasing, drilling, sanding and grinding. Concrete in its plastic form is a highly alkaline and will burn or dry out skin severely with little prior indication

### SHORT TERM:

Shortness of breath, coughing associated with inhalation of dust from primary lung irritation.

- **SWALLOWED** Possible gastrointestinal irritant
- **EYES** May irritate eyes from small dust particles
- **SKIN** Cause irritation to skin
- **INHALED** Can cause irritation to nasal passages and respiratory tract

### LONG TERM (CHRONIC):

Brick dust generated from cutting, sanding, drilling, chasing and sanding may contain a percentage of respirable silica. Prolonged exposure to respirable dust, which contains quartz above the exposure limits, could lead to chronic respiratory disease, such as silicosis, bronchitis and lung cancer.

Crystalline silica is a form of quartz or cristobalite is carcinogenic to humans.

Studies have shown that smoking increases the risk of bronchitis, silicosis and lung cancer when exposed to crystalline silica.

### EMERGENCY/FIRST AID PROCEDURES:

- INHALATION:** Remove to fresh air , loosen restrictive clothing.  
Blow nose thoroughly, and swab nasal passage with a Damp cotton wool, flush mouth and throat with water, spit out.  
If discomfort continues seek medical attention.
- INGESTION:** Do not induce vomiting. Drink water or milk.
- EYE CONTACT:** Flush eyes with copious amounts of water for 15 minutes, ensure to retract eye lids frequently during Flushing.  
If irritation is evident and continues, seek medical attention.
- SKIN CONTACT:** Rinse off affected area with copious amounts of soap and water.  
If rash occurs and persists seek medical Attention.  
Remove contaminated clothing if wet.

## PRECAUTION FOR USE

### OSH WORKPLACE EXPOSURE STANDARDS:

*Applies to Airborne dust*

Respirable quartz	0.2 mg/m <sup>3</sup> respirable dust (8 hour TWA)
Particulates not otherwise classified	10 mg/m <sup>3</sup> inspirable dust (8 hour TWA)
	3 mg/m <sup>3</sup> respirable dust (8 hour TWA)

Keeping the material damp will assist in dust suppression.

### PROVIDE VENTILATION:

General ventilation is usually sufficient. If airborne dust is a regular occurrence then Local Exhaust Ventilation may need to be considered as a control measure if dust concentrations exceed the Workplace Exposure Standard.

### RESPIRATORY PROTECTION:

Use particulate respirator if dust is present of Class P1 or P2 conforming to AS1716 should dust generated exceed exposure.

### EYE PROTECTION:

Wear AS/NZS approved glasses, goggles or face shield when dust is generated due to mechanical degradation of bricks e.g. cutting, drilling, chasing, sanding.

### PROTECTIVE GLOVES:

Wear leather gloves to protect hands against abrasion.

### SPECIAL PRECAUTIONS:

- Avoid conditions that will create dust in closed areas.
- Control dust exposures to below the OSH Workplace Exposure Standards by working methods, ventilation or respiratory protective equipment.
- Use general ventilation unless process creates dust when other dust reducing methods should be considered for control.

## **FIRE AND EXPLOSION DATA:**

*Non-flammable and non-explosive (Class B).*

## **STORAGE AND HANDLING**

### **SPILLS:**

#### **Steps to be taken in case material is spilled:**

Use dry clean up methods that do not disperse dust into the air or allow material to enter drains or waterways.

Avoid inhalation of dust and contact with skin.

Emergency procedures are not required.

Small amounts of material can be disposed of as common waste or returned to the container for later use if it is not contaminated.

Large amounts may require special handling.

Material should be kept out of storm water and sewer drains.

Any discharge during clean up should comply with Resource consent requirements and any relevant District or Regional Council rules.

### **WASTE DISPOSAL METHOD:**

May be buried in approved land disposal facility in accordance with local regulations. Does not require special transport arrangements.

## **OTHER RELATED INFORMATION**

- 1. The Health and Safety in Employment Act 1992 requires employers to identify hazards, assess health risks and use appropriate controls to reduce risks. The Approved Code of Practice "Management of Substances Hazardous to Health" (MOSHH) requires that assessments be made where hazardous substances are used. This material is a hazardous substance as defined by the MOSHH Approved Code of Practice.*
- 2. This material may contain crystalline quartz and while under most circumstances it is unlikely that that sufficient respirable dust will be raised to cause long term health problems employers are still required to make that assessment for their own processes. This Material Safety Data Sheet can be used to supply part of the information required for that assessment.*
- 3. The Health and Safety in Employment Act 1992 also requires that personnel working with hazardous substances receive appropriate training in safe work habits, respiratory protection and health risks.*