

**MATERIAL SAFETY DATA SHEET**

**STATEMENT OF HAZARDOUS NATURE**  
“Hazardous according to criteria of Worksafe Australia”

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**COMPANY DETAILS**

Company: **NUCON PTY LTD**  
Address: **Hart Street, Upper Coomera, Q, 4209**  
Telephone: **07 5573 8000**  
Emergency Telephone Number: **0412 289 039**

UN NUMBER: None Allocated      Dangerous Goods Class – N/A  
Hazchem Code – N/A  
Poison Schedule – Not Scheduled

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**1. PRODUCT IDENTIFICATION**

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Product Name: **Concrete**  
Other Names: Pre-mixed concrete, Ready-mixed concrete, Grout, Mortar  
Manufacturer’s Product Code: Shows – strength – cement type – aggregate used or product name

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**USE:** A material used extensively as a structural component in building and construction.

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**PHYSICAL DESCRIPTION/PROPERTIES**

Appearance: A mouldable plastic generally grey mixture which will set and harden to become a stable solid. Colour may vary from near white to any other colour.

Boiling/Melting Point	N/A	Flash Point (degC)	N/A
Vapour Press (mmHg @25degC)	N/A	Flammibility limits (%)	N/A
Percent Volatiles	N/A	Autoignition temp (degC)	N/A
Specific Gravity	See bulk density		
Bulk Density	2250-2550 kg/cubic metre	pH	12-13

## INGREDIENTS

Chemical Entity	CAS No	Proportion
Portland Cement	(65997-15-1)	low-med
Crushed Stone & Gravel	-	med-high
Sand	-	med-high
Water	(7732-18-5)	low
<u>Sometimes Added:</u>		
Pozzolans	(68131-74-8)(65997-69-2)	low
Pigments	-	low
Silica Fume	(112945-52-5)	low
Chemical Admixtures	-	low
Polystyrene Aggregate	-	low-med-high
Other ingredients may be present in product.		

**NOTE:**Chromium VI is a trace impurity in Portland Cement.

The relative proportions of ingredients are defined as:

High	More than 60%
Medium High	30% to 60%
Medium Low	10% to 30%
Low	1% to 10%
Very Low	Less than 1%

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## 2. HEALTH HAZARD INFORMATION

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### HEALTH EFFECTS

#### (a) Short Term (acute) exposure:

##### Plastic freshly mixed concrete:

Swallowed:	Abrasive and mildly corrosive
Eyes:	Irritating to eyes (R36 by Worksafe definition)
Skin:	Irritating to skin (R38 by Worksafe definition)
Inhaled:	Not Applicable

##### Hardened Concrete:

Dust generated during sawing, cutting etc. can cause skin, eye and respiratory irritation.

#### (b) Long Term (chronic) exposure:

##### Plastic, freshly mixed concrete:

Skin irritation, dermatitis or sensitisation may occur in some individuals.

**Hardened Concrete:**

Dust generated during sawing, cutting etc. can cause skin, eye and respiratory irritation.

**(c) Long Term (chronic) exposure:****Plastic, freshly mixed concrete:**

Skin irritation, dermatitis or sensitisation may occur in some individuals.

**Hardened Concrete:**

Dust from cutting, coring or working can cause nose and eye inflammation and may cause dermatitis leading to cracking of the skin. Dust from hardened concrete may contain Crystalline Silica. Prolonged exposure above the exposure standard to respirable dust which contains Crystalline Silica, such as silicosis and may be associated with the development of lung cancer.

**FIRST AID**

Swallowed:	Drink water or milk. Do not induce vomiting.
Eyes:	Flush eyes with clean running water for 15 minutes. See doctor if discomfort persists.
Inhaled:	Remove to fresh air. Dust in nose should clear.
Spontaneously:	See doctor if discomfort persists.
First Aid Facilities:	Water to irrigate eyes.

**ADVICE TO DOCTOR**

Chrome sensitisation may occur due to present of trace of Ghromium VI. Alkaline properties can produce alkaline burns to skin and eyes. Treat symptomatically.

**NOTE:** Chromium VI is a trace impurity in Portland Cement.

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**3. PRECAUTIONS FOR USE**

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**EXPOSURE STANDARD** (Applies to airborne dust)

**Worksafe Australia:** Inspirable (inhalable) dust 10mg/cubic metre  
Respirable Quartz – currently under review, but a recommendation has been made to adopt 0.2mg/cubic metre as an interim standard.

To date Australian States have been applying  
0.1mg/cubic metre or 0.2mg/cubic metre.

## **ENGINEERING CONTROLS**

### **Hardened Concrete:**

Provide adequate ventilation and/or local dust extraction or water spray when hard concrete is machined or worked and dust is produced.

## **PERSONAL PROTECTION**

### **Plastic freshly mixed concrete:**

Impervious PVC gloves, boots, clothing to minimise direct contact with concrete. Safety glasses or goggles where splashing is possible.

### **Hardened Concrete:**

Personal Protective Equipment should not be required unless dust is generated by the mechanical degradation of the concrete.

### **Coring:**

For dust generated during such mechanical degradation. Eg. Cutting working of the concrete, wear gloves and either skin protection to reduce exposure to concrete (Eg. Long sleeves). Respiratory protection of class P1 conforming to AS1716 should be worn when the dust generated exceeds Exposure Standards. Hearing and eye protection should be worn when using power tools.

## **FLAMMABILITY**

Not Flammable. Not Combustible.

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## **4. SAFE HANDLING INFORMATION**

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### **STORAGE AND TRANSPORT**

Generally transported in specially designed agitator vehicles. Transported to final mould while in plastic state.

### **SPILLS AND DISPOSAL**

**Spills:** Form into suitable size and shape and allow to harden.

**Disposal:** As solid fill under Local Government Regulations.

### **FIRE / EXPLOSION HAZARD**

Not Flammable or Combustible.

## **OTHER INFORMATION**

Plastic, freshly mixed concrete is corrosive to Aluminium.

**Definitions:** R36 = Irritating to eyes  
R38 = Irritating to skin

## **FOR INFORMATION**

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Issue Date: 20/07/2007

We believe that the information given herein is accurate and given in good faith, but no warranty expressed or implied is made. Where the information provided herein discloses a potential hazard or hazardous ingredient, adequate warning should be provided to employees and users and appropriate precautions taken when using the product.