



Material Safety Data Sheet

# HIGH EARLY STRENGTH GREY CEMENT

## Statement of Hazardous Nature

This product is classified as hazardous according to criteria of Worksafe Australia

BGC Cement  
 77 Vulcan Road  
 Canning Vale  
 Western Australia  
 Telephone: (08) 9334 4555

<b>Product Name</b>	BUILDERS CHOICE <sup>®</sup> High Early Strength Grey Cement
Other Names	Hi-Early Grey Cement, HES Cement, Type HE cement
Manufacturer's Product Codes	HG20
U.N. Number	None allocated
CAS Number	<i>See Physical Description below</i>
Dangerous Goods Class	None allocated
Hazchem Code	None allocated
Poisons Schedule	Not Scheduled
Uses	High Early Strength Grey cement is used where higher than normal concrete compressive strengths are required at an early age. Typically these uses include pre-cast concrete, concrete product manufacture, and structural concrete where formwork needs to be stripped and re-used in a rapid turnaround situation.
<b>PHYSICAL PROPERTIES</b>	
Appearance	A fine grey powder.
Boiling Point / Melt Point	Not applicable
Vapour Pressure	Not applicable
Per Cent Volatiles	Not applicable
Specific Gravity	3.0 to 3.4
Flash Point	Not applicable
Flammability/Combustibility	Non-flammable; Non-combustible

Autoignition Temperature	Not applicable
Other Properties	Not explosive. No odour. Hardens on mixing with water.

## PHYSICAL DESCRIPTION

Physical characteristics of cements are that they are alkaline in nature. The pH of water solution (slurry) of cements can be as high as 13.5

COMPONENT	CAS NUMBER	PROPORTION (%)
Type HE Cement	65997-15-1	100

## HEALTH HAZARD INFORMATION

### *HEALTH EFFECTS*

**Swallowed:** Mild corrosive action.

**Eye:** Short-term exposure - irritating. Long-term exposure - irritating may cause inflammation of the cornea.

**Skin:** Short-term exposure - irritating. Long-term exposure - wet cement, especially as an ingredient in plastic (unhardened) concrete, mortar or slurry, is slightly caustic and can dry the skin. There are also trace amounts of water-soluble hexavalent chromium present in cement (0-20ppm) and in some individuals may cause allergic dermatitis.

**Inhaled:** Short-term exposure - irritating. Long-term exposure - repeated inhalation of cement dust containing crystalline silica can cause bronchitis or pneumoconiosis of the lungs. It is recommended that all storage and work areas should be smoke free zones. Inhalation of high levels of cement dust may result in severe inflammation of the small airways of the lung and asthma-like symptoms.

### *FIRST AID*

**Swallowed:** Brush dry material from face and wash with copious amounts of clean water. Do not induce vomiting; give water containing sugar or milk to drink. Seek medical attention.

**Skin:** Wash thoroughly with clean running water and mild soap. A shower may be required.

**Eyes:** Immediately irrigate with copious amounts of clean running water for at least 15 minutes. Do not rub eyes. Seek medical attention.

**Inhaled:** Move to outside fresh air area, and seek medical attention if effects persist.

**Advice to Doctor:** Contact a poisons information centre. For Western Australia, telephone 13 11 26

## ***PRECAUTIONS FOR USE***

**Exposure Limits:** Cement is classified as an inert nuisance dust.

**TLV:** 5mg/m<sup>3</sup> for respirable dust and 10mg/m<sup>3</sup> for total dust.

Wet cement, particularly in plastic (un-hardened) concrete, mortar or slurry, can dry the skin and cause alkali burns. Continued exposure, for individuals who are allergic to chromium, may cause severe allergic dermatitis.

**Ventilation:** Avoid generating dust. Suitable means of dust collection or suppression should be applied as necessary in the working environment, to maintain acceptable levels of air-borne dust. For bulk deliveries, closed pumping systems are recommended. For bagged deliveries, follow personal protection instructions below if no local exhaust ventilation is available. Work areas should be cleaned regularly by vacuuming. Persons with a history of respiratory illness or reduced pulmonary function should avoid work places with high dust levels.

### **Personal Protection:**

**Skin:** - Wear loose comfortable clothing. Wash work clothes regularly. Apply barrier cream to hands or wear cotton or light duty leather gloves or equivalent (AS 2161).

**Eyes:** - Safety spectacles with side shields or safety goggles (dust resistant: AS/NZS 1336) should be worn if dust likely to be generated.

**Respiratory:** - None required if engineering and handling controls are adequate. If dust is generated wear a suitable P1 or P2 particulate respirator (AS/NZS 1715). Use only respirators that bear the Australian Standards mark and are fitted correctly. Note that persons with facial hair will have difficulty in obtaining a satisfactory face seal. For alternatives see AS/NZS 1715: Selection, use and maintenance of respiratory protective devices.

**Flammability/Combustibility:** Cement is non-flammable and non-combustible.

## **SAFE HANDLING INFORMATION**

**Storage and Handling:** Store in a dry place. Cement should be stored away from moisture, steam, acid or acid fumes, in containers that prevent ingress of moisture, as this will cause it to set and hardened in storage. Concrete or steel silos, FIBC's (bulker bags) lined with plastic, or plastic-lined paper sacks are the most usual forms of storage. Transportation is usually in bulk by means of pneumatic rail or road tankers, in FIBC's or in paper sacks on pallets.

**Spills and Disposals:** Spills may be cleaned up by any dry method such as broom, shovel or vacuum device, with care taken to minimise dust evolution into the worker environment. Clean up personnel should wear full cover clothing, gloves, boots, dust masks and goggles. Carefully dispose of excess product and packaging by collecting for disposal as a trade waste in accordance with local authority guidelines.

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**CONTACT POINT:** BGC Cement (08) 9334 4555  
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Western Australia

*The information in this document is believed to be accurate at the date of publication. Please check the currency of this MSDS by contacting (08) 9334 4555.*

*The provision of this information should not be construed as a recommendation to use this product in violation of any patent rights or in breach of any statute or regulation. Users are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Users should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace and in conjunction with other substances or products.*

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