

# **MATERIAL SAFETY**

## **DATA SHEET**

For

Portland Cement Products

(Complies with OSHA's Hazard communication Standard, 29 CFR 1910 1200)

Revised 9/01/05

**GIANT CEMENT COMPANY**

**HARLEYVILLE, SOUTH CAROLINA FACILITY**

# SECTION I

## MANUFACTURE'S NAME AND ADDRESS

Giant Cement Company  
Post Office Box 218  
Harleyville, South Carolina 29448

## EMERGENCY TELEPHONE NO.

(803) 496-2101 (OFFICE)  
(843) 851-9898 (SALES)

## CHEMICAL NAME AND SYNONYMS

Portland Cement (CAS #65997-15-1)

## TRADE NAME AND SYNONYMS

Giant Cement : Type I	(Portland Cement)
Giant Cement : Type II	(Portland Cement)
Giant Cement : Type III	(Portland Cement)
Giant Mix : Type N	(Masonry Cement)
Giant Mix : Type S	(Masonry Cement)
Giant Mix : Type M	(Masonry Cement)
Giant Mix : Type N	(Pigmented Masonry Cement)
Giant Mix : Type S	(Pigmented Masonry Cement)

## CHEMICAL FAMILY

## FORMULA

## CAS Number    Percentage by wt.

### Calcium Salts:

Tricalcium Silicate	$3\text{CaO}\cdot\text{SiO}_2$	12168-85-3	45-60
Dicalcium Silicate	$2\text{CaO}\cdot\text{SiO}_2$	10034-77-2	10-30
Tricalcium Aluminate	$3\text{CaO}\cdot\text{Al}_2\text{O}_3$	12042-78-3	4-13
Tetracalcium Alumino Ferrite	$4\text{CaO}\cdot\text{Al}_2\text{O}_3\cdot\text{Fe}_2\text{O}_3$	12068-35-8	8-16
Calcium Sulfate - Dihydrate	$\text{CaSO}_4\cdot 2\text{H}_2\text{O}$	13397-24-5	4-7

### Other Salts:

Small amounts of Magnesium Oxide (MgO), and trace amounts of Potassium Sulfate ( $\text{K}_2\text{SO}_4$ ) and Sodium Sulfate ( $\text{NaSO}_4$ ) may also be present.

# SECTION II - HAZARDOUS INGREDIENTS

Portland cement is classified merely as a nuisance dust by OSHA (29 CFR 1910.1000, Table Z-3), MSHA (30 CFR 56.5001, ACGIH TLV's for 1973, Appendix E), and ACGIH (TLV's for 1985-86 Appendix D). Portland cement is NOT listed by NTP, IARC, or OSHA as containing carcinogens.

### SECTION III - PHYSICAL DATA

#### BOILING POINT

Not applicable; portland cement is a powdered solid

#### SPECIFIC GRAVITY

3.00 - 3.20

#### VAPOR PRESSURE

Not applicable; portland cement is a powdered solid

#### PERCENTAGE VOLATILES BY VOLUME

0%

#### VAPOR DENSITY

Not applicable; portland cement is a powdered solid

#### EVAPORATION RATE

Not applicable; portland cement is a powdered solid

#### SOLUBILITY IN WATER

Slight (0.1 - 1.0%)

#### APPEARANCE AND COLOR

Gray powder; no odor

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

#### FLASH POINT

Portland Cement is noncombustible and nonexplosive

#### SPECIAL FIREFIGHTING PROCEDURES

Not applicable

#### FLAMMABLE OR EXPLOSIVE LIMITS

Not applicable

None

#### UNUSUAL FIRE & EXPLOSION HAZARDS

#### EXTINGUISHING MEDIA

Not applicable

### SECTION V - HEALTH HAZARD DATA

THRESHHOLD LIMIT VALUE

Respirable Dust - 5mg/m<sub>3</sub>  
Total Dust - mg/m<sub>3</sub>

EFFECTS OF EVEREXPOSURE

Acute: Cement, especially as an ingredient in plastic (unhardened) concrete, can dry the skin and cause alkali burns. Cement dust can irritate the eyes and upper respiratory system.

EMERGENCY & FIRST AID PROCEDURES

Irrigate eyes with water.  
Wash exposed skin areas with soap and water. If irritation persists, consult physician.

Chronic: Cement dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the eyes. Hypersensitive individuals may develop an allergic dermatitis (skin rash).

**SECTION VI - REACTIVITY DATA**

STABILITY

Product is stable.  
Keep dry until used.

HAZARDOUS DECOMPOSITION PRODUCTS

None

INCOMPATIBILITY

None

HAZARDOUS POLYMERIZATION

Will not occur.

**SECTION VII - SPILL PROCEDURES**

SPILL CLEANUP METHOD

Use dry cleanup methods that do not disperse the dust into the air.

WASTE DISPOSAL METHOD

Material can be returned to container for later use, or it can be disposed of as a common waste.

**SECTION VIII - SPECIAL PROTECTION INFORMATION**

RESPIRATORY PROTECTION

In dusty environments, use a NIOSH approved respirator or dust mask.

VENTILATION

In enclosed, dusty environments use exhaust fans to control airborne dust levels.

EYE PROTECTION

In dusty environments, use tight fitting goggles.

SKIN PROTECTION

Use barrier creams, gloves, boots and clothing to protect the skin from prolonged contact with cement, especially in plastic (unhardened) concrete. Immediately after working with cement, workers should wash exposed areas with soap and water. Precautions must be observed because wet cement burns with little warning - little heat is sensed.

**SECTION IX - SPECIAL PRECAUTIONS**

HANDLING AND STORAGE PRECAUTIONS

None (See section VIII)

OTHER PRECAUTIONS

None

## SECTION X - ABBREVIATIONS

ACGIH

American Conference of  
Governmental Industrial Hygienists

MSHA

Mine Safety and Health Administration

CAS

Chemical Abstract Service

NIOSH

Nation Institute for Occupational  
Safety & Health

CFR

Code of Federal Regulations

NTP

National Toxicology Program

IARC

International Agency for  
Research on Cancer

OSHA

Occupational Safety and Health  
Administration

m<sup>3</sup>

cubic meter

TLV'S

Threshold Limit Values

mg

milligram