I. PRODUCT IDENTITY:

Plastic (wet), Hardened Portland Cement Concrete

Manufactures Name and Address

Cemstone Products Co., Cemstone Ready Mix.

2025 Centre Pointe Blvd., Suite 300
Mendota Heights, MN 55120

Emergency Telephone Number

(612) 688-9292 (1-800-Cemstone)

Telephone Number for Information

(612) 688-9292

Date Prepared

January 1, 2004

II. EMERGENCY AND FIRST AID PROCEDURES:

Skin Contact: Wash skin with large amounts of soap and clean water. For minor irritation, apply a lanolin-containing cream to skin after washing. Contact a physician if persistent or severe irritation or discomfort occurs.
Eye Contact: Contact a physician immediately. flush eyes with large amounts of clean water for at least 15 minutes.
Ingestion: Due to the nature of this material, it is unlikely that it will be ingested. If this does occur, remove individual from area. Two or three glasses of milk or water should be provided to dilute stomach contents, if the individual is conscious. Do not induce vomiting. Contact a physician or poison control center.

III. HAZARDOUS INGREDIENTS:

Concrete is a mixture of inert gravel, sand, Portland cement, and water. It may also contain chemical admixtures and/or flyash. The chemical admixtures are present in quantities comprising less than 1% of the material.

The hazardous ingredients in plastic (wet) concrete cannot become airborne. However, when the water is added to the dry ingredients, it reacts with the calcium oxide in the Portland cement to form calcium hydroxide - a corrosive chemical which will irritate the eyes and skin upon contact. Concrete dust from hardened Portland cement concrete may also contain hazardous ingredients in sufficient concentrations to cause skin, eye, or respiratory disease.

Chemical - Common Name	OSHA PEL	NIOSH REL	%	CAS. Number
Portland Cement	5.0 mg/M3 respirable dust 15.0 mg/M3 total dust	5.0 mg/M3 respirable dust 10.0 mg/M3 total dust	20 - 30	65997-15-1
Calcium Oxide	5.0 mg/M3 respirable dust	2 mg/M3 total dust	2 - 4	1305-62-0
Sand, Quartz, Crystalline Silica	Approximately 0.1 mg/M3 respirable dust	0.05 mg/M3 respirable dust	10 - 20	14808-60-7
Gravel	None	None	40 - 50	1317-67-3

The product is delivered as a ready mixed cement mud, so there is no dust hazard present from the wet product and the OSHA PEL's and NIOSH REL's generally would not be applicable at the time of delivery.

IV. PHYSICAL CHARACTERISTICS:

Appearance:.....gray, plastic, granular mud
Melting point:.....not applicable
Boiling point:.....not applicable
Specific gravity:.....(water=1) normal range 1.5-2.9
Vapor pressure:.....not applicable
Vapor density:.....not applicable
Stability:.....stable
Incompatible materials:.....none
Hazardous polymerization:.....none
Special precautions:.....will harden in 2-8 hours
Neutralizing chemicals.....not applicable

V. FIRE AND EXPLOSION HAZARD INFORMATION:

Flash point:.....not applicable
Flammable limits:.....not applicable
Extinguishing media: .....not applicable
Special fire fighting procedures:.....not applicable
Unusual fire/explosion hazards:.....not applicable

VI. SPECIAL PROTECTION AND HEATH HAZARD INFORMATION:

Routes of entry and Heath Effects:

Skin/Eye Contact: Wet ready mix concrete mud has an alkalinity level of pH12 to pH13, and so may cause irritation and alkali burns. Prolonged or repeated contact may cause allergic dermatitis in sensitive individuals. Skin contact may cause local irritation of the effected area. Pre-existing skin conditions may be aggravated by exposure.
Ingestion: Unlikely. May cause irritation.
Inhalation: Wet ready mix concrete mud does not pose an inhalation hazard. *HOWEVER, SAWING, GRINDING, CUTTING, DRILLING, OR OTHERWISE DISTURBING HARDENED CONCRETE MAY CONTRIBUTE TO ELEVATED LEVELS OF AIRBORNE RESPIRABLE SILICA DUST, WHICH MAY CAUSE* SILICOSIS. *ALWAYS USE APPROPRIATE RESPIRATORY PROTECTION IN DUSTY ENVIRONMENTS.*

SILICOSIS:

Silicosis is a progressive lung disease caused by breathing respirable particles of silica dust over a period of time. Individuals vary in their susceptibility. Chronic silicosis may develop after 10 or more years of exposure to crystalline silica at relatively low levels. Accelerated silicosis may result from exposure to high concentrations over 5-10 years. acute silicosis occurs where exposure concentrations are the highest and can cause symptoms to develop within a few weeks to 5 years. Dry cough may be an early manifestation of silicosis. As the disease progresses, the cough may become more prolonged and be associated with sputum production. The most frequently observed symptom are unproductive cough, dyspnea (labored or difficult breathing), chest pains, and changes in breath sounds.

VII. PERSONAL PROTECTION AND HAZARD CONTROL INFORMATION:

Good Work Practices: Minimize skin contact. Use goggles or face shield when splashing is possible. Use rubber gloves and other skin coverings to prevent contact. Clothing saturated with plastic (wet) concrete should be removed promptly to prevent continued contact with skin.
Ventilation: Not required with plastic (wet) concrete.
Respiratory: Not required with plastic (wet) concrete.
Personnel Protective Equipment: EYES: Wear safety goggles or face shield. SKIN: Wear waterproof gloves, boots and normal work clothing covering arms, legs and body.

VIII. PRECAUTIONS FOR SAFE HANDLING AND USE:

Plastic (wet) Concrete:
Small Spills: Material will harden in 2-8-hours and can generally be removed after hardening. If removing while still wet, water may be used to dilute. Use personnel protective equipment described above.
Large Spills: Notify safety personnel. Clean-up personnel need to use eye and body protection as described above.
Hardened Portland Cement Concrete: RESPIRABLE DUST MAY BE GENERATED WHEN HARDENED CONCRETE IS SUBJECTED TO MECHANICAL FORCES, SUCH AS IN DEMOLITION WORK AND SURFACE TREATMENT (SAWING, GRINDING, GROOVING, CHISELING Etc). To the extent practical, use wet methods to minimize airborne dust levels when sawing or using other concrete renovation methods. Wear an appropriate and approved respirator when the work generates visible airborne dust. Providing exhaust ventilation to remove the dust to an unoccupied area when sawing or using other renovation methods may also contribute to reduced dust levels. Persons not wearing appropriate respiratory protective equipment should be excluded from dusty areas until the demolition work has been completed and the dust has cleared. When clearing renovation or demolition refuse, avoid re-entraining dust. Use wet methods or a vacuum with a high efficiency filter to remove dust.

IX. HAZARD CLASSIFICATION:

the International Agency for Research on Cancer (IARC) classify crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as a group 1 carcinogen. The National Toxicology Program (NTP), and the National Institute for Occupational Safety and Heath (NIOSH) classify crystalline silica as a probable carcinogen.

X. MSDS PREPARATION:

January 1, 2004