



1341 W. Mockingbird Lane
Dallas, TX 75247

TXI Operations, LP

HMIS

HEALTH	2*
FIRE	0
PHYSICAL HAZARD	1
PPE	X

Material Safety Data Sheet

Portland Cement

SECTION 1 – IDENTITY

<p>Distributed by: TXI Operations, LP Address: 1341 W. Mockingbird Lane Dallas, TX 75247 Product Name: Portland Cement (TXI002) Chemical Name: N/A Common Name: N/A Chemical Family: N/A Formula: A heterogeneous mixture of basic calcium silicates, aluminates and ferrites with small impurities of magnesia, chromium and complex alkali metal compounds. Trade Name and Synonyms: Portland Cement, Hydraulic Cement Types I, II, I/II, III, ILA, Class A, Class C and Class H. Special Certification: NSF/ANSI-61 (Types I and II only)</p>	<p>Emergency Phone (CHEMTREC): 800-424-9300 Outside USA: 703-527-3887 Telephone for Information: Don Bell 972-647-7088 Telephone for Emergency: CHEMTREC 800-424-9300</p>
--	--

MSDS prepared: November 1998

Last revised: June 2011

SECTION 2 – COMPOSITION AND INFORMATION ON INGREDIENTS

Name	CAS #	%Typical	TLV (Units)	PEL (Units)
Portland Cement	65997-15-1	90-96	1 mg/m ³	5 mg/m ^{3*} 15 mg/m ^{3**}
Gypsum	13397-24-5	2 - 5	10 mg/m ³	5 mg/m ^{3*} 15 mg/m ^{3**}
Limestone	1317-65-3	0 - 5	10 mg/m ³	5 mg/m ^{3*} 15 mg/m ^{3**}
Blast Furnace Slag	65996-69-2	0 - 5	10 mg/m ³	5 mg/m ^{3*} 15 mg/m ^{3**}
Silica, crystalline, quartz	14808-60-7	0 - 0.05	0.025 mg/m ³	4.9 mg/m ^{3*} (10 mg/m ³ / (0.05% SiO ₂ +2)) 14.6 mg/m ^{3**} (30 mg/m ³ / (0.05% SiO ₂ +2))

* Respirable Fraction (Applicable if <1% crystalline silica is present.)

**Total Dust

TLV: Threshold Limit Value established by the American Conference of Governmental Industrial Hygienists (ACGIH).

PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration (OSHA).

SECTION 3 – PHYSICAL DATA

Appearance and Odor: Fine, gray powder. No odor.
Boiling Point: N/A
Percent Volatile by Volume: 0
Percent Soluble in Water: Slight (0.1 – 1.0)
Specific Gravity (H₂O=1): 3.05-3.20
Vapor Density (Air=1): N/A
Reactivity in Water: Will not evolve flammable or toxic gases
Freezing Point: N/A
Vapor Pressure (mmHg): N/A
Evaporation Rate (n-Butyl Acetate=1): N/A
Volatile Organic Content: N/A

SECTION 4 – FIRE AND EXPLOSION DATA

Flash Point: Will not ignite
Auto Ignition Temperature: N/A
Extinguishing Media: N/A
Unusual Fire and Explosion Hazards: None
Special Fire Fighting Procedures: None
Flammable Limits in Air (% by Volume)
Lower: N/A
Upper: N/A

SECTION 5 – HEALTH INFORMATION

HMIS Rating:

HEALTH	2*
FIRE	0
PHYSICAL HAZARD	1
PPE	X

(0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe, * = Chronic Health Hazard)

Signs and Symptoms of Exposure

Acute Overexposure:

Inhalation:

Irritation of the nose, throat and respiratory tract.

Eye Contact:

When wet, contact with eyes may result in irritation and/or alkali burns.

Skin Contact:

Discomfort or pain cannot be relied upon to alert a person to hazardous skin exposure. Consequently, the only effective means of avoiding skin injury or illness involves minimizing skin contact, particularly with wet cement. Exposed persons may not feel discomfort until hours after the exposure has ended and significant injury has occurred.

Dry Portland cement contacting wet skin or exposure to moist or wet Portland cement may cause more severe skin effects including irritation, thickening, cracking or fissuring of the skin. Prolonged exposure can cause severe skin damage in the form of (alkali) chemical burns.

Ingestion:

May cause blockage and alkali burns of mouth, throat and stomach.

Chronic Overexposure:

Inhalation:

Cement dust can cause inflammation of the lining tissue of the interior of the nose.

Eye Contact:

May cause inflammation of the cornea.

Skin Contact:

Some individuals may exhibit an allergic response upon exposure to Portland cement, possibly due to trace elements of chromium. The response may appear in a variety of forms ranging from a mild rash to severe skin ulcers. Persons already sensitized may react to their first contact with the product. Other persons may first experience this effect after years of contact with Portland cement products.

Medical Conditions Generally Aggravated by Exposure

Pre-existing upper respiratory and lung diseases may be aggravated by exposure to Portland cement. Dermatitis or other skin disorders may be aggravated by exposure, possibly due to trace elements of chromium, including an unusual (hyper) sensitivity to hexavalent chromium (chromium +6) salts.

Chemical/Component Listed as Carcinogen

Crystalline Silica, Quartz

Other Exposure Limits

None

Emergency & First Aid Procedures for Indicated Routes of Entry

Inhalation: Remove to fresh air. Seek medical assistance immediately.

Eyes: Rinse with copious amounts of water for 15 minutes. Seek medical assistance immediately.

Skin: Rinse with copious amounts of soapy water. Seek medical assistance if irritation develops. If allergic reaction occurs, avoid all future contact. Alkali burns may occur without causing immediate pain, thus the product should not be left in contact with the skin or indirectly contacting the skin by soaking through clothing. Immediately remove any product from the skin, and remove any clothing that has been in contact with the product to avoid alkali burns.

Ingestion: Do not induce vomiting. Drink copious amounts of water or milk. Seek medical assistance immediately.

SECTION 6 – REACTIVITY DATA

Stability: Stable

Conditions to Avoid: None Known

Incompatibility: Material is highly alkaline. Contact with strong acids will produce a violent, exothermic reaction and may evolve toxic gases or vapors, depending upon the acid involved.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition or Combustion Products: None Known

SECTION 7 – SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Leaked or Spilled:

Wear personal protective equipment to prevent skin and eye exposures. Use respiratory protection as necessary. Prevent product from entering sewer or waterways.

Waste Disposal Method:

Consult federal, state and local regulations. This material, if it becomes a waste, is not classified as a RCRA hazardous waste (40 CFR 261).

SECTION 8 – PERSONAL PROTECTION INFORMATION

Respiratory Protection

Avoid actions that cause dust to become airborne. Use local or general exhaust ventilation to control exposures below applicable exposure limits.

Use NIOSH/MSHA approved (under 30 CFR 11) or NIOSH approved (under 42 CFR 84) respirators in poorly ventilated areas, if an applicable exposure limit is exceeded, or when dust causes discomfort or irritation. (Advisory: Respirators and filters purchased after June 10, 1998 must be certified under 42 CFR 84.)

Follow OSHA respiratory regulations (29 CFR 1910.134) to ensure employee training and protection are adequate.

Ventilation

Use local exhaust or general dilution ventilation to control exposure within applicable limits.

Protective Gloves

Chemical resistant gloves.

Eye Protection

Goggles or safety glasses with face shield.

Other Protective Clothing or Equipment

Avoid skin contact. Provide readily available eyewash stations.

SECTION 9 – SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing

Store in a cool, dry, ventilated storage area in closed containers. Avoid freezing temperatures during storage. Avoid breathing vapors. Store away from acids. Store away from water to preserve product.

Other Precautions

None Determined

SECTION 10 – OTHER REGULATORY INFORMATION

Status under USDOL-OSHA Hazard Communication Rule 29 CFR 1910.1200

Portland cement is considered a “hazardous chemical” under this regulation, and should be part of any hazard communication program.

Status under CERCLA/Superfund 40 CFR 117 and 302(v)

Not listed.

Hazard Category under SARA (Title III) Section 311 and 312

Portland cement qualifies as a “hazardous substance” with delayed health effects.

Status under SARA (Title III) Section 313

Not subject to reporting requirements under Section 313.

Status under (TSCA)

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory (TSCA).

Status under the Canadian Environmental Protection Act

Not listed.

Status under (PICCS)

Some ingredients are listed on the Philippine Inventory of Chemicals and Chemical Substances (PICCS).

Status under the Federal Hazardous Substances Act

Portland cement is a “hazardous substance” subject to statutes promulgated under the subject act.

Status under WHMIS

Portland cement is considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products regulations (class E - corrosive material) and is therefore subject to the labeling and MSDS requirements of the workplace hazardous materials information system (WHMIS).

SECTION 11 – CONTACT INFORMATION

MSDS Contact Information:

Technical Contact:

972-647-7088

To Request a MSDS or Check for Updates:

972-647-3886

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall TXI Operations, LP, or its affiliates, be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if TXI Operations, LP, or its affiliates, have been advised of the possibility of such damages.