



Research & Development Center

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MATERIAL SAFETY DATA SHEET

Effective Date: January 2006
Replaces June 1999

Material Safety Data Sheet
(OSHA 29 CFR 1910.1200)

Date of Preparation: January 12, 2010

For Portland Cement Concrete

Section 1 - Identity

Manufacturer's Name and Address

Frank Bryan Inc.
1263 Chartiers Avenue
McKees Rocks, PA 15136
412-431-2700

Section II - Hazardous Ingredients / Identity / Information

Common Name

Ingredients

Portland Cement Concrete

Tri-calcium silicate; Di-calcium silicate; Tri-calcium aluminate;
Tetra-calcium aluminato ferrite; Gypsum

Aggregates

Gravel, sand, stone which contain small amounts of crystalline silica*

Admixtures

Small amounts of organic and inorganic materials which have no effect on the hazards associated with the use of this product.

*Crystalline silica is a Category 1 human carcinogen

Section III - Physical / Chemical Characteristics

Solubility in water - slight (0.1 - 1%)

Specific gravity - 2.32

Gray colored semi liquid agglomeration

The following properties are applicable for concrete in the semi-liquid phase:

Boiling point: NA Vapor pressure: ND Percent Volatiles: ND Melting Point: ND
Flammability Limits: NA Solubility in water: Insoluble (miscible)

Section IV - Fire and Explosion Data

Portland cement concrete is non combustible and not explosive

Section V - Reactivity Data

Portland Cement concrete is stable. Portland cement concrete is not incompatible with other materials, will not decompose into hazardous by products and will not polymerize.

Section VI - Health Hazard Data

Swallowed: Small amounts ingested incidental to normal handling will have little or no effect. Larger amounts ingested may cause superficial burns to lips, mouth, stomach pains and discomfort

Eye: Will cause moderate to severe irritation to the eye and must be promptly removed to prevent further damage

Skin: May cause superficial burns to damp skin, especially if trapped against skin by clothing. Prolonged or repeated skin exposures may cause drying and cracking of the skin and may lead to dermatitis.

Inhaled: Will cause coughing and a dry throat. Over several years of prolonged or repeated exposure to high dust concentrations may lead to lung disorders. In severe cases these may include cancer.

Chronic: Prolonged or repeated inhalation of fine dusts may lead to congestive diseases of the lung or in extreme cases (after years of exposure) to lung cancer.

Section VII - First Aid

Swallowed: Do not induce vomiting. Rinse mouth clear with water and give two glasses to drink. If patient vomits involuntarily, encourage to lean forward to avoid aspirating. If symptoms persist seek prompt medical attention.

Eye: Immediately: Hold eyelids open and flush eye for 15 minutes with water (if available it is preferable to use sterile water or saline solution B.P. Ensure inside of eyelid is flushed by gently lifting eyelid away from eye top and bottom while flushing. If symptoms persist seek prompt medical attention.

Skin: Remove contaminated clothing and footwear (while under safety shower if appropriate). Flush affected area with water for 3-5 minutes followed by washing gently with soap and water for further 5 minutes. Rinse well and pat dry. If symptoms persist seek prompt medical attention.

Inhaled: Remove patient (while wearing SCBA or suitable dust mask if concentrations are high) to fresh air. Allow to rest. Rinse mouth and nose with water. Provide artificial respiration if breathing stops. Seek prompt medical attention unless recovery is virtually immediate.

First aid facilities: Provide normal industrial first aid facilities including eye-wash stations.

Section VIII - Advice to doctors

Provide supportive care and treatment based on the patient's reaction to the exposure.

Section IX - Personal protection

Respiratory Protection: Use good quality dust mask as required if dusty conditions exist.

Eye Protection: Wear safety glasses or goggles

Gloves: Use PVC or leather gloves

Clothing: Wear cotton or Tyvek coveralls fastened at the neck and wrist.

Industrial Hygiene: Follow normal industrial / chemical hygiene practices.