

Material Safety Data Sheet

May be used to comply with
 OSHA's Hazard Communication Standard,
 29 CFR 1910.1200. Standard must be
 consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072

IDENTITY (As Used on Label and List) READY-MIX CONCRETE	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
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Section I

Manufacturer's Name Smith Ready Mix, Inc.	Emergency Telephone Number (219) 462-3191
Address (Number, Street, City, State and ZIP Code) 251 W. Lincolnway Valparaiso, IN 46383	Telephone Number for Information (219) 462-3191
	Date Prepared 6/30/04
	Signature of Preparer (Optional)

Section II – Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (Optional)
Formula—Mixtures of portland or blended cements, concrete aggregates and chemical admixtures.				
Portland and Blended Cements: Portland Cement (CAS # 65997-15-1)				
3CaO-SiO ₂	(CAS # 12168-85-3)			
2CaO-SiO ₂	(CAS # 10034-77-2)			
3CaO-Al ₂ O ₃	(CAS # 12042-78-3)			
4CaO-Al ₂ O ₃ -Fe ₂ O ₃	(CAS # 12068-35-8)			
CaSO ₄ -xH ₂ O	(CAS # 13397-24-5)			
Plus traces of CaO, MgO, K ₂ SO ₄ , and Na ₂ SO ₄ , may also be present				
Other Ingredients: Concrete Aggregates, Inert gravel, sand and rocks				
Admixtures, May include fly ash, granulated slag and very small amounts of organic and inorganic materials which have no effect on the hazards associated with the use of the product.				
Carcinogenic Potential: Concrete frequently contains crystalline silica in concentrations greater than 0.1%, principally contributed by the aggregates. Respirable crystalline silica is classified by IARC (International Agency for Research on Cancer) as a known human carcinogen and by NTP (National Toxicology Program) as "reasonably anticipated to be a carcinogen." Crystalline silica in wet concrete is not respirable and does not pose a hazard when the concrete is in its plastic or unhardened state. Once concrete has hardened, airborne dust generated by grinding, sawing, drilling, breaking, etc. can lead to potentially hazardous exposures to workers and appropriate respiratory protection precautions should be taken.				

Section III – Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H ₂ O-1)	N/A
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water Slight (0.01 to 1%) pH 12-13.5			
Appearance and Odor Gray, plastic, flowable, granular mud and odorless			

Section IV – Fire and Explosion Hazard Data

Flash Point (Method Used) N/A	Flammable Limits N/A	LEL N/A	UEL N/A
Extinguishing Media	N/A		
Special Fire Fighting Procedures	N/A		
Unusual Fire and explosion Hazards	None		

(Reproduce locally)

OSHA 174, Sept. 1985

Section V – Reactivity Data

Stability	Unstable		Conditions to Avoid Aluminum powder and other alkaline earth elements will react producing hydrogen gas.
	Stable	X	However, product hardens in 2 to 8 hours and is no longer hazardous
Incompatibility (Materials to Avoid) None			
Hazardous Decomposition or Byproducts None			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI – Health Hazard Data

Route(s) of Entry:	Inhalation? No	Skin? Yes	Ingestion? No
Health Hazards (Acute and Chronic) Acute—Due to a high pH. Must avoid contact with skin and eyes. Wet plastic, unhardened concrete, can dry the skin and cause alkali burns.			
Chronic—Hypersensitive individuals may develop an allergic dermatitis. (Cement Dermatitis) Cement may contain trace amounts of chromium.			
Carcinogenicity:	NTP? No	IARC Monographs? No	OSHA Regulated? No
Signs and Symptoms of Exposure Irritation of skin and burning sensation particularly when exposure is in an area of skin previously subjected to abrasion or irritation. Must avoid contact with skin and eyes.			
Medical Conditions Generally Aggravated by Exposure None known.			
Emergency and First Aid Procedures Irrigate eyes with water. Wash exposed areas of the body with soap and water, and rinse with copious amounts of water.			

Section VII – Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled Spill does not increase hazard.
Wast Disposal Method Material can be retained until it hardens when it can be disposed of as common waste.
Precautions to Be Taken in Handling and Storing Use barrier creams, gloves, boots, and clothing to protect the skin from prolonged contact with plastic concrete. Particularly avoid abrasion of the skin in contact with unhardened plastic concrete. Precautions must be observed because cement burns occur with little warning—little heat is sensed. Eye protection is not generally required except when placing methods cause splash then tightfitting goggles should be used.

Section VIII – Control Measures

Respiratory Protection (Specify Type) Wet - Not Required. Dry - Use NIOSH/OSHA Approved Dust Respirator if Dust is Generated			
Ventilation	Local Exhaust	Special	
N/A	Mechanical (General)	Other	
Protective Gloves See VII		Eye Protection See VII	
Other Protective Clothing or Equipment See VII			
Work/Hygienic Practices See VII			