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) Freshly Mixed Unhardened 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.*

Section I

Manufacturer's Name Baker-Shindler Ready Mix	Emergency Telephone Number 419- 782-5080
Address *(Number, Street, City, State, and ZIP Code)* 525 Cleveland Avenue	Telephone Number for Information 419- 782- 5080
Defiance, OH 43512	Date Prepared 11-14-2008
	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:				
Tricalcium Silicate ($3CaO \cdot SiO_2$)		*(CAS # 12168-85-3)*		
Dicalcium Silicate ($2CaO \cdot SiO_2$)		*(CAS # 10034-77-2)*		
Tricalcium Aluminate ($3CaO \cdot Al_2O_3$)		*(CA S # 23042-78-3)*		
Tetracalcium Aluminoferrite ($4CaO \cdot Al_2O_3 \cdot Fe_2O_3$)		*(CAS # 12068-35-8)*		
Calcium Sulfate Dihydrate ($CaSO_4 \cdot 2H_2O$) (Gypsum)		*(CAS # 7778-18-9) PEL-TWA*	*15 Mg/M³ Total Dust*	
Plus traces of Calcium Oxide (CaO), Magnesium Oxide (MgO), Potassium Sulfate (K_2SO_4), and Sodium Sulfate (Na_2SO_4)			*5 Mg/M³ Respirable Fraction*	
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				

Section III - Physical/Chemical Characteristics

Boiling Point	*N/A*	Specific Gravity ($H_20 = 1$)	*2.28 - 2.42*
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 for Plastic Concrete	*12.5*
Appearance and Odor	*Gray, plastic, flowable, granular composite - Faint odor*		

Section IV - Fire and Explosion Hazard Data

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

Based on OSHA 174, Sept. 1985

User MSDS # 150

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid	However, product stiffens and hardens in 2 to 8 hours
	Stable	X		and is no longer hazardous
Incompatibility (Materials to Avoid)			*None*	
Hazardous Decomposition of Byproducts			Product hardens in a few hours and then does not decompose	
Hazardous Polymerization	May Occur		Conditions to Avoid	
	Will Not Occur	X	None	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation? *NO*	Skin? *YES*	Ingestion? *NO*
Health Hazards (Acute and Chronic)			
Acute - Wet plastic, unhardened concrete can dry the skin and cause alkali burns			
Chronic - Hypersensitive individuals may develop an allergic dermatitis - Portland cement may contain trace amounts of chromium			
Carcinogenicity:	NTP? *NO*	IARC Monographs? *NO*	OSHA Regulated? *NO*
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, long term exposure to airborne dust generated by grinding, sawing, drilling or breaking of hardened concrete, could potentially lead to hazardous exposures to workers and subsequent health related problems. Appropriate respiratory protection should be worn during these operations.			
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			
Medical Conditions Generally Aggravated by Exposure			
Open wounds or sores			
Emergency and First Aid Procedures			
Irrigate eyes with water. Wash exposed areas of the body with soap and water - change clothing if contaminated with wet concrete			

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled
Spill does not increase hazard
Waste Disposal Method
Material can be retained until it hardens when it can be disposed of as a 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.
Other Precautions
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 tight fitting goggles should be used.

Section VIII - Control Measures

Respiratory Protection *(Specify Type)*	*Not required*		
Ventilation *N/A*	Local Exhaust *None*		Special *None*
	Mechanical *(General)* *None*		Other *N/A*
Protective Gloves *Yes - waterproof*		Eye Protection	*Yes - tight fitting goggles*
Other Protective Clothing or Equipment	*Waterproof boots, long-sleeved shirt and full length trousers should be worn*		
Work/Hygienic Practices	*Avoid contact between skin/eyes and wet/moist concrete*		

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