

MATERIAL SAFETY DATA SHEET (MSDS)

***KWIKO - A - SEALING CEMENT
CAT. NO.'S AC1A, AC5A, AC1F01A,
ACK6FA, ACK12FA***

THE MATERIAL SAFETY DATA SHEET (MSDS) FOR AN APPLETON ELECTRIC COMPANY PRODUCT WHICH YOU HAVE RECENTLY PURCHASED IS ATTACHED.

THIS PRODUCT IS PURCHASED FROM THE MANUFACTURER BY APPLETON AND IS DISTRIBUTED WITH NO MODIFICATION OTHER THAN SPECIAL PACKAGING.



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)
FONDU Calcium Aluminate Cement

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 Lafarge Calcium Aluminates, Inc.	Emergency Telephone Number (804) 543-8832
Address (Number, Street, City, State, and ZIP Code) Foot of Ohio Street	Telephone Number for Information (804) 543-8832
Post Office Box 5806	Date Prepared January 1, 2005
Chesapeake, Virginia 23324	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)
N/A				

Totally Fused Material: Does not contain free aluminum oxide

CAS # 65997-16-2

Section III -- Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H ₂ O = 1)	3.2
Vapor Pressure (mm Hg.)	N/A	Melting Point Pyrometric Cone Equivalent	1270°C
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A

Solubility in Water

Negligible

Appearance and Odor

Brown odorless powder

Section IV -- Fire and Explosion Hazard Data

Flash Point (Method Used) None	Flammable Limits None	LEL	UEL
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Extinguishing Media

N/A

Special Fire Fighting Procedures

N/A

Unusual Fire and Explosion Hazards

None

Cement:

The cement can reach its full compressive strength of (over) 5000 psi within a cure time of 24 hours at standard atmospheric conditions. During the curing process the cement expands and binds the electrical wires to the seal fitting. The cement expansion is predictable and measurable.

The cement which is known by its trade name, KWIKO A, consists of the following by weight:

<u>Analyte</u>	<u>Approx. wt.</u>
- SiO ₂	8%
- Al ₂ O ₃	24%
- Fe ₂ O ₃	9%
- CaO	38%
- SO ₃	15%
- TiO ₂ , Mn ₂ O ₃ , P ₂ O ₅ , SrO	6%
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Total	100%

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	

Incompatibility (Materials to Avoid) **Inert**

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? **Yes** Skin? **No** Ingestion? **Not known**
 Health Hazards (Acute and Chronic) **Nuisance dust, abrasive to skin, irritant to eye**

Carcinogenicity: **None** NTP? IARC Monographs? OSHA Regulated?

Signs and Symptoms of Exposure **Irritation to nose and throat; irritation of skin and eye**

Medical Conditions Generally Aggravated by Exposure **None known**

Emergency and First Aid Procedures **Remove to dust-free area, wash affected skin**

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Treat as nuisance dust

Waste Disposal Method **No special precautions**

Precautions to Be Taken in Handling and Storing **None**

Other Precautions **None**

Section VIII — Control Measures

Respiratory Protection (Specify Type) **Nuisance dust respirator**

Ventilation	Local Exhaust	Recommended	Special	None
	Mechanical (General)	Recommended	Other	None
Protective Gloves	Recommended	Eye Protection	Recommended	

Other Protective Clothing or Equipment **Not necessary**

Work/Hygienic Practices **No special precautions**



MATERIAL SAFETY DATA SHEET
(OSHA 29 CFR 1910.1200)
GROUND GRANULATED IRON BLAST FURNACE SLAG

SECTION I - IDENTITY

Manufacturer's Name and Address: Buzzi Unicem USA Inc.
14900 Intercoastal Drive
New Orleans, LA 70129
Emergency Telephone Number: (800-424-9300) Chemtrec
Information Telephone Number: (504) 254-6435 or (504) 254-6454
(888) 422-2425
Date of Preparation: 08/01/02
Common Name and Synonyms: Slag Cement; Blast Furnace Slag Cement;
Iron Slag Cement; Pig Iron Slag Cement
Water Granulated Ground Blast Furnace Slag Cement

SECTION II - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Ingredients*	CAS No.
Calcium Oxide	1305-78-8
Fused Silica Oxide	60676-86-0
Magnesium Oxide	1309-48-4
Aluminum Oxide	1344-28-1
Sulfur	7704-34-9
Manganese Oxide	7439-96-5
Potassium Oxide	12136-45-7
Sodium Oxide	12401-86-4
Titanium Oxide	13463-67-7
Ferric Oxide	1309-37-1

*Since Blast Furnace Slag Cement is manufactured from materials mined from the earth, and process heat is provided by burning fuels derived from the earth, trace but detectable amounts of naturally occurring metals, and possibly harmful elements may be found during chemical analysis. Ingredients are expressed as oxides for quantitative purposes. Actual oxides do not generally occur in "free form" but rather as complexed silica-based glasses or crystals. May contain more than 0.1% of free crystalline silica.

SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

Solubility in Water - Slight (0.1 to 2%)

pH:- becomes alkaline when mixed with water, in the range 9.0 - 11.5

Specific Gravity - 2.7 to 3.1 g/cm³

Light gray to tan or white colored fine powder with a detectable sulfur odor

The following properties are not applicable as ground blast furnace slag is a solid in powder form: boiling point, vapor pressure, vapor density, melting point, evaporation rate.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Ground Blast Furnace Slag is non-combustible and not explosive. Therefore there are no flammable or explosive limits nor unusual fire and explosion hazards.

SECTION V - REACTIVITY DATA

Ground Blast Furnace Slag is stable. Ground Blast Furnace Slag will not polymerize.

Ground Blast Furnace Slag when wet may react with aluminum powder and other alkali and alkaline earth elements to liberate hydrogen gas. Hydrogen Sulfide gas may be released if the Slag comes in contact with acids. Hydrogen Sulfide is a toxic gas.

SECTION VI HEALTH HAZARD DATA

OSHA (Occupational Safety and Health Administration), MSHA (Mine Safety and Health Administration), and ACGIH (American Conference of Governmental Industrial Hygienists) classify the (PEL) Permissible Exposure Limit as 5 mg/m³ for respirable dust and 10 mg/m³ for total dust; for an 8 hour period. Ground slag is not known to cause cancer, however, it may contain more than 0.1% free crystalline silica. Free crystalline silica can cause cancer. Free titanium oxide has been classified as having limited evidence of causing cancer in animals. Exposure to ground slag dust can affect the skin, the eyes, and mucous membranes.

ACUTE EXPOSURE: Contact with wet slag can dry the skin and cause severe chemical/alkali burns. Contact with the eye can cause severe chemical burns and possibly leave permanent damage.

CHRONIC EXPOSURE: Breathing ground slag dust can cause inflammation of the lining tissue in the interior of the nose, throat, and lungs. Some individuals may develop an allergic dermatitis. Prolonged exposure to high concentrations of free silica may cause silicosis.

EMERGENCY FIRST AID PROCEDURES: Irrigate (flood) eyes immediately and repeatedly with clean water for up to 15 minutes. Wash exposed skin areas with soap and water. Apply sterile dressings. If clothing and shoes are exposed, remove immediately and wash the skin. Get prompt medical attention.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

If ground slag is spilled, it can be cleaned up using dry methods that do not disperse dust into the air. Avoid breathing the dust. Emergency procedures are not required since there are no hazardous substances in the ground slag as supplied. The slag can be treated as a common waste for disposal.

SECTION VIII - CONTROL MEASURES

In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended.

Local exhaust can be used, if necessary, to control airborne dust levels.

The use of barrier creams or impervious gloves, boots, and clothing to protect the skin from contact with ground slag is recommended.

Following work with ground slag, workers should shower with soap and water.