

**SECTION I: Product and Company Identification**
**Product Name:**  
Calcium Aluminate Cement

**Emergency Number:**  
(254) 289-2118

**Supplier:**  
EGS Electrical Group  
9377 West Higgins Road  
Rosemont, IL 60018

**Information Number:**  
(254) 968-6071 Ext. 202

**Trade Name:**  
Kwiko-A-Sealing Cement  
Catalog Numbers: AC1A; AC5A; AC1FO1A; ACK6FA; ACK12FA

**Date Issued:** August 24, 2006

**Revision Date:** July 11, 2008

**SECTION II: Composition / Information on Ingredients**
**Chemical Nature:**

Substance obtained from the milling of a calcium aluminate clinker. The major elements appearing in the clinker are oxides based on Al, Ca, Si and Fe. The cement particles are polyphasic and as such the following mineralogical phases can be found depending on the grade of clinker.

Component	CAS Number	%
CaO•Al <sub>2</sub> O <sub>3</sub>	12042-68-1	
CaO•2Al <sub>2</sub> O <sub>3</sub>	12004-88-5	
12CaO•7Al <sub>2</sub> O <sub>3</sub>	12005-57-1	
2CaO•Al <sub>2</sub> O <sub>3</sub> •SiO <sub>2</sub>	12068-46-1	
4CaO•Al <sub>2</sub> O <sub>3</sub> •Fe <sub>2</sub> O <sub>3</sub>	12068-35-8	
Al <sub>2</sub> O <sub>3</sub> (α, β)	1344-28-1	

The generic CAS number for the polyphasic aluminate cement is:  
Calcium Aluminate Cement 65997-16-2

Calcium aluminate cement does not contain free lime or crystalline silica (such as quartz, tridymite or cristobalite) in measurable amounts.

Kwiko-A-Sealing Cement	65997-16-2	100%
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**SECTION III: Hazards Identification**
**HMIS Rating (NCPA)**
**Health**  
0

**Flammability**  
0

**Reactivity**  
0

**Personal Protection**  
0

**NFPA Rating:**

**Health**  
0

**Flammability**  
0

**Reactivity**  
0

**Personal Protection**  
0

**WHMIS Classification:**


Class D, division 2B toxic material; skin or eye irritant.  
Class E, corrosive material; forms alkaline solution with water.

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**Most Important Hazards:**

In contact with water, an alkaline solution will be formed (pH 11 – 11.5). In spite of the pH level, the alkaline reserve is limited and the product has not been classified as irritant according to the criteria defined in the EEC directives (93/21/EEC).

A dust problem may occur in confined areas. It is regarded as nuisance dust without any known specific effects to health.

**Specific Hazards:**

Calcium aluminates react chemically and harden when mixed with water. The reaction is exothermic resulting in a temperature rise. If large quantities of cement are exposed to sufficient quantities of water, steam can be formed and the temperature may increase enough to cause a risk of burns during the reaction.

**Carcinogen Listed in:**

Calcium aluminate cement is not a listed carcinogen with NTP, OSHA or IARC monograph.

**SECTION IV: First Aid Measures****Inhalation:**

Remove person to fresh air. If symptoms persist, seek medical attention.

**Skin Contact:**

Remove contaminated clothing and wash affected area with soap and water.

**Eye Contact:**

Flush eyes with plenty of clean water. If symptoms persist, seek medical attention.

**Ingestion:**

Do not induce vomiting. Wash mouth with water and give plenty of water to drink.

**SECTION V: Fire-Fighting Measures**

Calcium Aluminate Cement is not flammable and will not support a flame. It does not promote combustion with other materials.

**SECTION VI: Accidental Release Measures****Personal Precautions:**

See section 7 and 8.

**Environmental Precautions:**

Avoid emission of dust.

**Methods of Cleaning Up:**

For large amounts it is preferable to use dry methods while avoiding dust exposure.

Do not empty material into drains, sewers or water basins as the material hardens in contact with water.

**SECTION VII: Handling and Storage****Technical Measures and Precautions:**

Use common procedures for handling and storage of industrial powder products with particular attention to suppression of dust and spillage, to avoid unnecessary exposure.

Store in dry conditions, preferably above ground protected by shrink wrap or in bulk silo.

**Safe Handling Advice:**

No particular precautions.

**Incompatible Products:**

Contact with water or water vapor during storage will hydrate the product which will cause lumps and affect the performance.

**Packaging Materials:**

No special restrictions with respect to safety.

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**SECTION VIII: Exposure Control / Personal Protection****Engineering Measures:**

Mechanical ventilation is recommended wherever feasible for evacuation of dust during handling operations (discharging, mixing, conveying, packing, etc).

**Control Parameters:**

The following occupational exposure limits defined for non-specified nuisance dust are applicable.

	<b>OSHA PEL</b>	<b>ACGIH PEL</b>
Total Dust:	15 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Respirable Dust:	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>

**Personal Protective Equipment:**

ANSI approved glasses or goggles should be worn whenever there is a risk of powder or wet mixture entering the eyes.

Protective clothing is recommended, including waterproof gloves and boots.

NIOSH approved respiratory protection should be worn when the conditions are such that the personal exposure is estimated to approach or exceed the stated limits.

**SECTION IX: Physical and Chemical Properties**

**Physical State:** Dry Powder

**Color:** Grey

**Odor:** None

**Specific Gravity:** 2.9 – 3.3

**Vapor Density:** N/A

**Vapor Pressure:** N/A

**Evaporation Rate:** N/A

**Boiling Point:** N/A

**Freezing Point:** N/A

**pH:** 11 – 11.5 when wet

**Water Solubility:** Negligible

**SECTION X: Stability and Reactivity****Stability:**

In a dry environment the product is chemically stable.

When mixed with water it reacts chemically and hardens, forming stable calcium aluminate hydrates. The reaction is exothermic and continues for up to 24h. Total heat released is < 500 kJ/kg

**Hazardous Decomposition Products:**

None

**Section XI: Toxicological Information**

**Acute Toxicity:** None

**Local Effects:**

May cause local irritation to eye, throat or skin, but is not classified as irritant according to EEC legislation.

**Sensitization and Chronic Toxicity:**

Does not contain measurable amounts of soluble Chromium (VI).

**Section XI: Ecological Information****Possible Environmental Effects:**

After hydration (a few hours or days in moist conditions) the product is stable in soil and in water, with a negligible mobility of its constituents.

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**Section XII: Disposal Considerations**

Bags of unused material or empty contaminated packaging, as well as hardened residue may be disposed by landfill, if in accordance with local or national disposal regulations.

The conditions or methods for handling, stocking, using or eliminating this product are beyond the control of EGS Electrical Group. EGS Electrical Group shall therefore not be held liable in case of loss, damage or any expense incurred related to the handling, the stocking, the use or the elimination of this product howsoever.

**Section XIV: Transport Information**

This product is not classified as a hazardous material under U.S. DOT or Canadian TDG regulations.

**Section XV: Regulatory Information****CERCLA/Superfund:**

This product is not listed as a CERCLA hazardous substance.

**Inventory Listings:**

This substance is listed on:

U.S. TSCA inventory Section 8 (b)

Canadian Inventory, the DSL

**Notice**

The information and recommendations herein are, to the best of EGS Electrical Group's knowledge and belief, accurate and reliable as of the date issued and are offered for the user's consideration and examination. EGS Electrical Group does not warrant or guarantee their accuracy or reliability and shall not be liable for any loss or damage arising out of the use thereof. It is the user's responsibility to satisfy itself that they are suitable and complete for its particular use.

The Environmental Information included herein as well as the Hazardous materials Identification System (HMIS) and National Fire Protection Association (NFPA) ratings have been included by EGS Electrical Group in order to provide additional health and hazard classification information. The ratings recommended are based upon the criteria supplied by the developers of these rating systems, together with EGS Electrical Group interpretation of the available data.

**Prepared by:** James H. Sommer, P.E.

**Date:** July 11, 2008