# **MATERIAL SAFETY DATA SHEET**

#### Innovative Concrete Technology Corp.

Updated 07/07/2004

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### **Section 1 - Product Information**

Product Name: Fast Set Description: Calcium Nitrile Based Solution Synonyms: None Molecular Formula: N/A Chemical Family: Mixture

### **Section 2 - Hazardous Ingredients**

Chemical Names(s):	CAS Number	OSHA	PEL
Calcium Nitrate	3% 10124-37-5	NE	NE
Calcium Nitrate	32% 13780-06-08	NE	NE
N-Nitrosodiethanolamine	0.05% 01116-54-7	NE	NE

NE= None Established

### **Section 3 - Physical Properties**

Appearance: Red/Orange, clear fluid.
Specific Gravity: 1.1
PH: 8.0-9.5
Boiling Point: 226 F
Solubility in water: Complete

Odor: Slight sweet odor. Vapor Pressure (mm Hg.): 15@25C %Volatiles: 70% as water Evaporation Rate (BAc = 1): < 1

## Section 4 - Fire and Explosion Data

Flash Point: Not Applicable:

Extinguishing Media: Not Applicable

**Unusual Hazards:** Calcuim Nitrile solution was tested using the DOT Liquid Oxidizer Test (UN34.4.2) and determined not to be an oxidizer. However, if dried, this material will become an oxidizer which may provide oxygen to combustible materials. Resultant fires should be extinguished with carbon dioxide foam.

# **Section 5 - Health Effects**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

**Acute Overexposure:** Effects Based on test data and experience with similar products it is believed that this is a low hazard material. Ingestion may cause gastric upset, pain, diarrhea, lethargy. Inhalation of the vapors may result in respiratory irritation.

**Chronic Overexposure Effects:** There are no known chronic effects associated with this material.

Inhalation: Irritation, sensitization and dermatitis

Ingestion; May cause Gastrointestinal distress or irritation.

**Skin:** Prolonged and repeated contact may cause irritation and result in sensitization and allergic reaction.

**Eyes:** Vapor may cause irritation, redness and tearing. Liquid may cause sever irritation with possible irreversible injury.

#### **First Aid Procedures:**

**Skin:** Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops, get medical attention.

**Eyes:** Immediately rinse eyes with running water for 15 minutes. If irritation develops, get medical attention.

**Ingestion:** If swallowed, dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

**Inhalation:** Move to fresh air. Aid in breathing, if necessary and get immediate medical attention.

### Section 6 - Reactivity Data

Stability Data: Stable under normal conditions

Incompatibility: None known.

Hazardous Polymerization: Does not occur.

Corrosive Properties: Not corrosive

**Oxidizer Properties:** See section 4

**Conditions or Materials to avoid:** Will Decompose if dried and heated to >1000F. Avoid contact with Acids, Ammonium Salts, activated Carbon, reducing agents and cyanides. Avoid direct contact with other admixtures and any other material which could cause the Ph of the product to fall below 8.0. Those conditions can result in the formation of nitrous oxides creating a hazardous situation.

# **Section 7 - Personal Protection**

**Clothing:** Gloves, coveralls, apron and boots as necessary to prevent contact.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Respiration: If vapors or mist are generated, wear a NIOSH/MSHA approved if allergies to said product exist.

**Ventilation:** Open all doors windows to allow for adequate air flow and circulation.

## Section 8 - Spill and leak/ environmental

Spills should be contained and placed in suitable containers for disposal in a licensed facility. Prevent product from entering drinking water supplies or streams. Due to health effects of ingestion, large releases of nitrile containing products should be prevented from contacting water systems.

According to EPA guidelines, spills of this product are not reportable. However, spill reporting requirements and reportable quantities vary by region.

**Waste Disposal:** Incinerate or bury as a solid in a licensed facility. Do not discharge into waterways or sewer systems without proper authority.

**Container Disposal:** Recommend crushing or other means to prevent unauthorized reuse.

# **Section 9 - Regulatory Information**

RCRA Hazardous Waste Number: N/A CERCLA: No

HAZARD RATING: Health- 2 Fire- 0 Reactiv	/ity- 0 Special	I: NA
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This product is not a physical hazard according to the OHSA Hazard Communication Standard;

The information contained herein is to our knowledge true and accurate. All recommendations and suggestions are made without guarantee, since the conditions of use are beyond our control.

## **Section 10 – Toxicological Information**

Ingredient		
Chemical Name	CAS	Toxicity Data LD 50, LC50
	Number	ect.
Calcium Nitrite	13780-06-8	LD50 (oral, rat) 940 mg/kg
Calcium Nitrate	10124-37-5	
N-Nitrosodiethanolamine	1116-54-7	LD50(oral, rat) 7,5000 mg/kg