



**Material Safety Data Sheet**  
**BondCrete, Bonding Slurry**

**1. Product and Company Identification**

<b>Product Code</b>	BDC	<b>Emergency Phone</b>	CHEMTREC 800-424-9300
<b>Product Name</b>	BondCrete™	<b>Business Phone</b>	+(962-6) 487-4078
<b>Manufacturer</b>	Creative Concrete Concepts	<b>Business Fax</b>	+(962-6) 488-9133
<b>Address</b>	P.O. Box 925794		
<b>City, Zip, Country</b>	Amman, 11110 Jordan		
<b>Last Updated</b>	October 15, 2006		

**2. Composition / Information on Ingredients**

Chemical Name	CAS No.	ACGIH TLV	OSHA TWA
Hydraulic Portland Cement:	65997-15-1	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup> (Total) 5 mg/m <sup>3</sup> (Respirable)
Silica, Crystalline Quartz:	14808-60-7	0.05 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>

**3. Hazards Identification**

**Emergency Overview:**  
 Warning! Harmful if inhaled. Irritating to eyes and skin. May cause delayed lung injury (silicosis). Cancer hazard. Risk of cancer depends on duration and level of exposure.

**Acute Exposure:**  
 Airborne particles will irritate the eyes and may cause temporary but reversible respiration difficulties. Cement is a severe eye irritant. In combination with water, it may cause alkali burns.

**Chronic Exposure:**  
 Repeated inhalation of respirable silica in excess of the TWA over extended periods of time may result in irreversible fibrosis of the lungs (silicosis)

**Signs and Symptoms of Exposure:**  
**Inhalation**—Undue coughing, wheezing, and breathlessness.  
**Eyes**—Irritation, inflammation, or abrasion if the eye.  
**Skin**—Dryness, itching, rashes and burns may develop following contact with the skin. Dermatitis or skin sensitization may develop after repeated or prolonged skin contact.  
**Ingestion**—May cause Alkali burns of the mouth, throat, and gastrointestinal tract.

**Medical Conditions Generally Aggravated by Exposure:**  
 Dermatitis, pulmonary conditions and diseases.

**4. First Aid Measures**

**Emergency and First Aid Procedures:**  
**Inhalation**—Remove victim to fresh air. If respiratory symptoms persist or develop, GET MEDICAL ATTENTION.  
**Eyes**—DO NOT RUB. Flush eyes with plenty of water for 15 minutes while holding eyelids open. If irritation persists, GET MEDICAL ATTENTION IMMEDIATELY.  
**Skin**—Wash with soap and water. Remove contaminated clothing and wash before reuse. If symptoms develop, GET MEDICAL ATTENTION.  
**Ingestion**—DO NOT INDUCE VOMITING. Drink two glasses of water and GET MEDICAL ATTENTION.

### 5. Fire Fighting Measures

<b>Flash Point</b>	N/A	<b>Lower Explosive Limit</b>	N/A
<b>Auto Ignition Temperature</b>	N/A	<b>Upper Explosive Limit</b>	N/A
<b>Unusual Fire and Explosion Hazards</b>	None Known		

**Extinguishing Media:**

Product is not flammable. Use standard fire-fighting procedures without regard to product.

**Special Fire Fighting Procedure:**

N/A

### 6. Accidental Release Measures

**Steps to be Taken in Case Material is Released or Spilled:**

Keep people away. Vacuum, scoop, or broom-up spilled powders and place in containers. Avoid generation, exposure, and inhalation of dust. Collect spilled powders, place in non-leaking containers, seal tightly, and label properly. Dispose of in accordance with applicable local, county, state, and federal regulations.

### 7. Handling and Storage

**Safe Handling and Storage :**

Store in a cool, dry place, away from acids and strong oxidants and moisture. Keep containers closed.

### 8. Exposure Controls and Personal Protection

**Engineering Controls:**

Adequate ventilation and sufficient local exhaust as needed to maintain exposure below TWA and TLV limits.

**Personal Protective Equipment:**

All personnel must wear OSHA-NIOSH approved dust respirators when working with or near this product. Please refer to OSHA standards in 29 CFR 1910.134. Wear safety goggles to protect eyes. Aprons and gloves should be worn to minimize contact with skin.

**Other Protective Clothing Equipment:**

Wear suitable protective clothing to minimize skin contact.

**General Work Practices Hygiene Considerations:**

Minimize breathing of dust. Avoid prolonged or repeated contact with skin. Use good hygiene when handling this product. Cleanse skin thoroughly after handling and before eating or drinking. Product is easily removed with waterless, hand cleaners followed by washing thoroughly with soap and water. Remove contaminated clothing and launder or dry-clean before reuse. Remove contaminated shoes and thoroughly clean and dry before reuse.

### 9. Physical and Chemical Properties

<b>Appearance:</b>	Gritty Powder	<b>Appearance/Color/Odor:</b>	White/No Oder
<b>Melting Point/Range:</b>	N/A	<b>Boiling Point/Range:</b>	N/A
<b>Solubility in Water:</b>	Slight	<b>How to Detect this Compound</b>	N/A
<b>pH:</b>	N/A	<b>Specific Gravity (H<sub>2</sub>O=1):</b>	Approximately 2.7-3.0
<b>Molecular Weight:</b>	N/A	<b>Percent Volatiles:</b>	N/A
<b>Vapor Pressure (mmHg):</b>	N/A	<b>Vapor Density (Air=1):</b>	N/A
<b>VOC:</b>	Nil		

### 10. Stability and Reactivity

**Stability** Stable

**Conditions to Avoid** None

**Hazardous Polymerization** Will not occur

**Materials to Avoid** Oxidizers, acids, and moisture

**Hazardous Decomposition Products** No hazardous reaction under normal conditions.

## 11. Toxicological Information

### Health Hazards (Acute and Chronic):

Airborne particles will irritate the eyes and may cause temporary but reversible respiration difficulties. Cement, in combination with water, may cause alkali burns. Repeated inhalation of respirable silica in excess of the TWA over extended periods of time may result in irreversible fibrosis of the lungs (silicosis).

**IARC**-The International Agency for Research on Cancer evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances studies." For further information on the IARC evaluation, see *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans*, Volume 68, "Silica, Some Silicates..." (1997).

**NTP**-The National Toxicology Program, In its *Ninth Annual Report on Carcinogens*, classified "silica, crystalline (respirable)" as a known human carcinogen.

**OSHA**-Crystalline silica (quartz) is not regulated by the U.S. Occupational Safety and Health Administration as a carcinogen.

## 12. Ecological Information

### Aquatic Toxicity Rating:

LC<sub>50</sub> aquatic toxicity rating not determined. The addition of products containing cement to water will, however, cause the pH to rise and may therefore be toxic to aquatic life in some circumstances. Therefore, all possible efforts should be made to keep the product away from drains, surface and ground water, and soil.

## 13. Disposal Considerations

### Waste Disposal Method:

Use non-leaking containers, seal tightly and label properly. Dispose of in accordance with applicable local, county, state, and federal guidelines. Do not dispose in streams, wells, lakes, rivers, oceans, or sewers.

## 14. Transportation Information

**DOT Proper Shipping Name:** Dry Cement Color

**DOT Hazard Class ID Number:** Non-hazardous. Not required. Class 55

## 15. Regulatory Information

**Reportable Quantity** N/A

**NFPA Rating** 0=Insignificant, 1=Slight, 2=Moderate, 3=High, 4=Extreme

**Health** 2

**Flammability** 0

**Reactivity** 0

**Carcinogenicity Lists** Yes

**NTP** No

**IARC Monograph** Yes

**OSHA Regulated** Yes

### STATE REGULATIONS:

State of California *Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)*; WARNING: This product contains one or more chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.

### U.S. FEDERAL REGULATION:

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of hazard communication program including labeling, material safety data sheets, training, and access to written records. It is your legal duty to make all information in this Material Safety Data Sheet available to your employees.

## 16. Other Information

### **Before Using This Product:**

**IMPORTANT!** Read this MSDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure. This MSDS has been prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200). To the best of our knowledge, the information contained herein is accurate and the information is based on sources believed to be reliable. However, since data, safety standards, and government regulations are subject to change, CREATIVE CONCRETE CONCEPTS makes no warranty, either expressed or implied with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. The data on this sheet is related only to this specific material. It may not be valid for this material if used in combination with any other materials. It is the user's responsibility to determine suitability and completeness of this information with regards to a particular use. Additional information may be necessary or helpful for specific conditions and circumstances of use. Unknown hazards may exist and this material should be used with caution. CREATIVE CONCRETE CONCEPTS assumes no legal responsibility for use or reliance upon this data.