

# Material Safety Data Sheet BOND CERAM B210

HOTTEC CORP.  
One Terminal Way  
Norwich, Ct 06360

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## 1. CHEMICAL PRODUCT AND COMPANY DESCRIPTION

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Hottec Corp.  
One Terminal Way  
Norwich, CT 06360

### Emergency Phone Numbers:

For emergencies involving a spill, leak, fire, exposure, or accident  
Contact: Hottec Corp. 860-887-5111, emergency evenings 860-822-1701

### For Product Information:

860-887-5111

### Chemical Name or Synonym:

BOND CERAM B210

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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

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CAS NUMBER	/	NAME
7732-18-5		Water

### EXPOSURE LIMITS

PEL: Not Established  
TLV: Not Established

### PERCENTAGE

VOL	ND
WT	48-65

COMMON NAMES:

Listed on (list legend below):

00 19 22 23 50 51

CAS NUMBER / NAME

**EXPOSURE LIMITS**

PEL: Not Established

TLV: Not Established

**COMMON NAMES:**

Contains Sodium Silicate Liquid

Listed on (list legend below):

00 19 22 23 50 51

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List Legend

00 TSCA INVENTORY

22 CANADIAN DOMESTIC SUB LIST

50 PHILIPPINES INVENTORY (PICCS)

19 PA REQUIREMENT-3% OR GREATER

23 NJ REQUIREMENT-1% OR GREATER

51 EINECS

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### 3. HAZARDS IDENTIFICATION

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**EMERGENCY OVERVIEW**

**May cause permanent eye damage. Corrosive to eyes, skin, respiratory and digestive tract.**

**POTENTIAL HEALTH EFFECTS**

**ROUTES OF ENTRY:**

Ingestion, Inhalation.

**TARGET ORGANS:**

Eyes, Skin, Respiratory Tract, Gastrointestinal Tract.

**IRRITANCY:**

Severe, Potentially by all routes of exposure.

**SENSITIZING CAPABILITY:**

None known.

**REPRODUCTIVE EFFECTS:**

None known.

**CANCER INFORMATION:**

None known.

## **SHORT-TERM EXPOSURE (ACUTE)**

### **INHALATION:**

May cause coughing, sneezing or other symptoms of upper respiratory tract irritation. Exposure may result in lung tissue damage due to corrosive effects.

### **EYES:**

Overexposure will cause severe burns and potential permanent damage.

### **SKIN:**

Contact may cause burns and tissue destruction.

### **INGESTION:**

Can cause severe burns to the mucous membranes of the digestive tract.

## **REPEATED EXPOSURE (CHRONIC)**

No known chronic effects.

## **SYNERGISTIC MATERIALS:**

None known.

## **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:**

None known.

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## **4. FIRST AID MEASURES**

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### **EYES:**

**IMMEDIATELY FLUSH EYES WITH A DIRECTED STREAM OF WATER** for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue.

Washing eyes within several seconds is essential to achieve maximum effectiveness. **GET MEDICAL ATTENTION IMMEDIATELY.**

### **SKIN:**

Flush thoroughly with cool water under shower while removing contaminated clothing and shoes. Discard non-rubber shoes. Wash clothing before reuse. **GET MEDICAL ATTENTION AS SOON AS POSSIBLE.**

### **INHALATION:**

Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration. **GET MEDICAL ATTENTION IMMEDIATELY.**

**INGESTION:**

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. (If available, give several glasses of milk.) If vomiting occurs spontaneously, keep airway clear and give more water. GET MEDICAL ATTENTION IMMEDIATELY.

**NOTES TO PHYSICIAN:**

No specialized procedures. Treat for clinical symptoms.

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## 5. FIRE FIGHTING MEASURES

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Flash Point: Nonflammable

Method: Not Applicable

Autoignition Temperature: Nonflammable

**Flammable limits in air, by % volume**

Upper: Not applicable

Lower: Not applicable

**Extinguishing Media:**

Non-flammable / Non-combustible.

Use agents appropriate for surrounding fire.

**Fire Fighting Procedures:**

Wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus and full protective clothing.

**Fire And Explosion Hazard:**

None known.

**Sensitivity To Mechanical Impact:**

Not sensitive.

**Sensitivity To Static Discharge:**

Not sensitive.

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## 6. ACCIDENTAL RELEASE MEASURES

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**Personal Precautions:**

Evacuate unnecessary personnel.

Follow protective measures provided under Personal Protection in Section 8.

**Environmental precautions:**

Contain spill with dike to prevent entry into sewers or waterways.

Spills or releases should be reported, if required, to the appropriate local, state and federal agencies.

**Methods for cleaning up:**

Dry material can be shoveled up, liquid material can be removed with a vacuum truck.

Neutralize remaining traces with any dilute inorganic acid (hydrochloric, sulfuric or acetic acid).

Flush spill area with water followed by a liberal covering of sodium carbonate. All clean-up material should be removed for proper treatment or disposal. Spills on other than pavement (eg. dirt or sand) may be handled by removing the affected soil and placing in approved containers.

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## 7. HANDLING AND STORAGE

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**Handling:**

Wear personal protective equipment as described in Exposure Controls/Personal Protection (Section 8) of the MSDS.

Do not get in eyes, on skin or clothing.

Avoid breathing airborne particulates; wear respiratory protection when exposure is possible.

Wash contaminated clothing before reuse.

Wash thoroughly with soap and water after handling.

**Special mixing and handling instructions:**

Do not allow contact with materials as noted in Section 10.

Contact with acids will cause gelling and the evolution of heat.

**Storage:**

Keep container tightly closed and properly labeled.

Do not store in aluminum container or use aluminum fittings or transfer lines, as flammable hydrogen gas can be generated.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Engineering Controls:

Use adequate local exhaust ventilation where dust, mist or spray may be generated.

### PERSONAL PROTECTION

#### Respiratory:

Wear a NIOSH/MSHA approved respirator following manufacturer's recommendations, where airborne contaminants may occur.

#### Eye/face:

Wear chemical safety goggles plus full face shield to protect against contact when appropriate (ANSI Z87.2).

#### Skin:

Wear protective clothing to minimize skin contact.

Wear chemical resistant gloves such as rubber, neoprene or vinyl.

Wash contaminated clothing and dry before reuse.

#### Other:

Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1).

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Property	Principal Grade
Specific Gravity @ 20degrees C (H2O=1)	WD 43 1.43 +
PH	12.5
Density, lbs./gallon @ 20 degrees C (68degrees F)	13.8
Appearance and odor	White turbid liquid paste; none to slightly soapy odor.
Odor threshold	Not available
Vapor pressure	Not applicable
Vapor density (Air =1)	Not applicable
Evaporation rate	Not applicable

% Volatiles by Wt:	<65%
Boiling point @ 760 mm Hg	214 – 216degrees F (101-102degrees C)
Freezing point	30degrees F (-1degree C)
Solubility in H2O, % by Wt.	55 %
Octanol/water partition coefficient	Not applicable
Thermal decomposition temperature	Not available
VOC (g/1 by wt.)	Not applicable

## 10. STABILITY AND REACTIVITY

### Chemical Stability:

Stable     Unstable

### Reacts With:

Air     Oxidizers     Metals  
 Water     Acids     Other  
 Heat     Alkalis     None

### Hazardous Polymerization:

Occurs     Will Not Occur

### Comments:

Contact with acids will cause gelling and the evolution of heat.  
Prolonged contact with aluminum may produce flammable hydrogen gas.

### Hazardous Decomposition Products:

None.

## 11. TOXICOLOGICAL INFORMATION

### 1344-09-8      Silicic acid, sodium salt

ACUTE ORAL LD50 :                      (rat)                                      2000 to 3000 mg/kg

This product is an alkaline solution.

Exposure to this material may be evaluated as:

PEL=2mg/m3    Ceiling as NaOH  
TLV=2mg/m3    Ceiling as NaOH

## 12. ECOLOGICAL INFORMATION

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### 1344-09-8 Silicic acid, sodium salt

#### AQUATIC ECOTOX DATA

Fish:

LC50 (96 hr.) (Mosquitofish) 1800 – 2320 mg/L

Invertebrates:

EC50 (100 hr.) (Water flea) 247 mg/L

LC50 (48 hr.) (Water flea) 494 mg/L

LC50 (96 hr.) (Scud) 160 mg/L

LC50 (96 hr.) (Pond snail) 632 mg/L

LC50 (28 day) (Polychaete worm) 643 - 765 ug/L

Plant:

EC (7 day) (Phytoplankton) 1500 ug/L

#### TERRESTRIAL ECOTOX DATA

Wildlife:

LD (oral) Mouse 1.1 gm/Kg

#### ENVIRONMENTAL FATE DATA

Biotic:

Biodegradation Inorganic, not subject to biodegradation

Abiotic:

Water Solubility 100%

There is limited information on the environmental fate of this material. Laboratory tests indicate that it exhibits low toxicity to aquatic organisms and moderate toxicity to terrestrial animals. This material is inorganic and not subject to biodegradation. This compound is strongly alkaline and may raise the pH if dissolved in surface water. Due caution should be exercised to avoid the release of this material to the environment.

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## 13. DISPOSAL CONSIDERATIONS

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Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations.

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## **14. TRANSPORT INFORMATION**

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This material COULD be regulated by the DOT based upon the following:

Grades with SiO<sub>2</sub>/Na<sub>2</sub>O ratio greater than 1.62: Not DOT regulated

Grades with SiO<sub>2</sub>/Na<sub>2</sub>O ratio less than or equal to 1.62:

DOT proper shipping name: Caustic Alkali Liquids, NOS  
(Sodium Silicate)

DOT hazard class: 8

DOT identification number: UN1719

DOT packing group: II

DOT hazardous substance: Not applicable

DOT marine pollutant: Not applicable

Additional description requirement: Not applicable

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## **15. REGULATORY INFORMATION**

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### **U.S. Federal Regulations:**

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

To aid our customers in complying with regulatory requirements, SARA Title III Hazard Categories for this product are indicated below. If the word "YES" appears next to any

category, this product may be reportable by you under the requirements of 40.CFR.370. Please consult those regulations for details.

**TSCA:**

All components of this product that are required to be on the TSCA inventory are listed on the inventory.

**SARA/TITLE III Hazard Categories:**

Immediate (Acute) Health: Yes Reactive Hazard No  
Delayed (Chronic) Health: No Sudden Release of Pressure No  
Fire Hazard: No

**HMIS Hazard Ratings:**

Health Hazard: 3 Fire Hazard: 0 Reactivity: 0

**State Regulations:**

See Section 2. COMPOSITION/INFORMATION ON INGREDIENTS list legend for applicable state regulation.

Consult local laws for applicability.

**International Regulations:**

Consult the regulations of the importing country.

**Canada:**

WHMIS Hazard Class: E

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## 16. OTHER INFORMATION

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For additional non-emergency health, safety or environmental information telephone (860) 887-5111 or write to:

Hottec  
One Terminal Way  
Norwich, CT 06360

MSDS LEGEND:

ACGIH = American Conference of Governmental Industrial Hygienists

CAS = Chemical Abstracts Service Registry Number

CEILING = Ceiling Limit (15 Minutes)

CEL = Corporate Exposure Limit

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Limit (OSHA)

STEL = Short Term Exposure Limit (15 Minutes)

TDG = Transportation of Dangerous Goods (Canada)

TLV = Threshold Limit Value (ACGIH)

TWA = Time Weighted Average (8 Hours)

WHMIS = Worker Hazardous Materials Information System (Canada)

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