



## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

<b>Product name</b>	<b>Durabond D-60 Med. Set Series</b>
<b>Product name(s) covered</b>	See Section 16 for Product Names Covered.
<b>MSDS name</b>	Durabond D-60 Medium Set Mortar Series - Various Colors
<b>CAS number</b>	Mixture
<b>Product use</b>	Set Ceramic Tiles
<b>Generic description</b>	Polymer Modified Thin Set Mortar
<b>Manufacturer</b>	Bostik, Inc. 211 Boston Street Middleton, MA 01949 USA
<b>24 hour emergency assistance</b>	Telephone: 1-800-227-0332
<b>General assistance</b>	Telephone: 1-978-777-0100
<b>MSDS assistance</b>	Telephone: 1-414-607-1347

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

<b>Component(s)</b>	<b>CAS #</b>	<b>Percent</b>
Silica, Quartz	14808-60-7	40 - 70
Portland Cement	65997-15-1	30 - 60
Gypsum (Ca(SO <sub>4</sub> ),2H <sub>2</sub> O)	13397-24-5	0.5 - 1.5
<b>Composition comments</b>	Chronic overexposure to Silica can cause chronic lung disease (Silicosis) and/or cancer. Portland Cement contains up to 10 ppm (0.001%) Hexavalent chromium, which is a skin sensitizer and carcinogen. In its end use form, this product has a high pH and is caustic.	
<b>Chemical characterization</b>	Parts Per Million (ppm) = 0.0001% mg/kg = 1 ppm (0.0001%) g/kg = 1000 ppm (0.1%) Conversion from mg/m <sup>3</sup> to ppm: ppm = (mg/m <sup>3</sup> / molecular weight in grams) x 24.45	

### 3. HAZARDS IDENTIFICATION

<b>Emergency overview</b>	Exposure to dust may be irritating to eyes, nose, and throat. Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of Silica dust.  This product contains trace amounts of hexavalent chromium, a skin sensitizer and human carcinogen. Prolonged/repeated exposure may cause severe allergic skin reactions and/or cancer.  Wet product has a high pH and is caustic. Wet product or dry product on moist skin can potentially cause severe irritation and/or irreversible tissue damage due to chemical (caustic) burns.
<b>Potential health effects</b>	
<b>Skin</b>	Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis. Mechanical rubbing may increase skin irritation.  Skin contact may cause an allergic response in some individuals due to trace amounts of chromium (6+) salts. Symptoms can range from a mild rash to severe skin ulcers. Persons already sensitized to hexavalent chromium may experience symptoms after minimal exposure.  Wet product has a high pH and is caustic. Exposure of sufficient duration to wet product, or to dry product on moist skin, can cause serious, potentially irreversible tissue damage due to chemical (caustic) burns, including third degree burns.
<b>Eyes</b>	Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of dry powder or with wet product can cause moderate eye irritation, chemical burns and blindness. Eye exposures require immediate first aid and medical attention to prevent significant damage to the eye.

<b>Inhalation</b>	This product contains free crystalline silica. Prolonged or repeated inhalation of crystalline silica can aggravate lung conditions and lead to silicosis, a seriously disabling and potentially fatal lung disease. Inhalation of free crystalline silica has also been linked to increased occurrence of renal disease and auto immune disorders.
<b>Ingestion</b>	May cause nausea, vomiting, pain, stomach upset, and diarrhea. Ingestion of large quantities may cause chemical burns in the mouth, throat, stomach, and digestive tract.
<b>Target organs</b>	Respiratory tract - Silica can target and damage the lungs. Some studies show an increased incidence in kidney and end-stage renal disease in individuals exposed to respirable Silica. Hexavalent chromium can cause skin sensitization and damage.

## 4. FIRST AID MEASURES

### First aid

<b>Skin</b>	Wash affected area with mild soap and water. If irritation persists, get medical attention. Seek medical attention for rash, burns, irritation, dermatitis, and prolonged, unprotected exposures to wet product.
<b>Eye</b>	Immediately flush with plenty of water for at least 15 minutes, holding eyelids open at all times. Get medical attention immediately.
<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately for a large dose exposure or if cough or other symptoms develop.
<b>Ingestion</b>	Due to the physical nature of this material, ingestion is unlikely to occur. If ingestion of a large amount does occur, get medical attention immediately. Do not induce vomiting unless directed to do so by medical personnel.
<b>Notes to physician</b>	Short-term exposure to very large amounts of respirable crystalline silica can cause serious lung inflammation and pulmonary edema, resulting in shortness of breath and low blood oxygen levels. Longer-term exposure may result in nodules of chronic inflammation and scarring in the lungs and chest lymph nodes. Symptoms of long-term exposure may resemble those of chronic obstructive pulmonary disease (COPD).

## 5. FIRE FIGHTING MEASURES

<b>Hazardous combustion products</b>	Non-combustible, substance itself does not burn.
<b>Extinguishing media</b>	Use any media suitable for the surrounding fires.
<b>Basic fire fighting procedures</b>	Not a fire hazard. This material will not burn. Wet product has a high pH and is caustic. Use personal protective equipment to prevent inhalation of airborne product and eye and skin contact with wet or dry product.
<b>Dust explosion hazard</b>	None Known
<b>Sensitivity to mechanical impact</b>	None Known
<b>Sensitivity to static discharge</b>	None Known
<b>Flash point</b>	Non- Flammable

## 6. ACCIDENTAL RELEASE MEASURES

<b>Emergency action</b>	Avoid actions that cause the dry product to become airborne during clean up. Avoid inhalation and contact with eyes and skin. Place spilled material into a container for reuse or proper disposal.  Wet product has a high pH and is caustic. Wear appropriate protective equipment as described in Section 8.
<b>Reporting</b>	See Federal reporting requirements listed in Section 15. We recommend you contact local authorities to determine if there may be other local reporting requirements.

## 7. HANDLING & STORAGE

<b>Handling</b>	Avoid breathing dusts from this material. Remove dust fines from air or wear recommended respirator. Avoid contact with skin and eyes. Promptly remove and launder clothing that is dusty or wet with product. Thoroughly wash skin after exposure to dry or wet product.
<b>Storage</b>	Store in a clean, dry area. Keep containers closed.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering controls</b>	Use local or general ventilation to control airborne dust below applicable exposure limits.
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**Eye protection** Wear safety goggles to prevent eye contact with dry or wet product. In extremely dusty or unpredictable environments, wear unvented or indirectly vented goggles to avoid eye irritation or injury.

**Skin and body protection** Wear impervious abrasion and alkaline resistant gloves and boots, long sleeved shirt, long pants, safety goggles and other protective clothing as required to prevent skin contact. Remove clothing and protective equipment that becomes dusty from dry product or saturated with wet product and immediately wash exposed areas.

**Respiratory protection** If ventilation is not sufficient to effectively prevent buildup of dusts, wear appropriate NIOSH/MSHA respiratory protection.

**General** Eyewash fountains and emergency showers should be readily available.

**Exposure limits**

**ACGIH - Threshold Limits Values - Time Weighted Averages (TLV-TWA)**

Gypsum (Ca(SO4).2H2O)	13397-24-5	<u>10 mg/m3 TWA (inhalable fraction, listed under Calcium sulfate)</u>
Portland Cement	65997-15-1	<u>10 mg/m3 TWA (particulate matter containing no asbestos and &lt;1% crystalline silica)</u>
Silica, Quartz	14808-60-7	<u>0.025 mg/m3 TWA (respirable fraction)</u>

**NIOSH - Pocket Guide - TWAs**

Gypsum (Ca(SO4).2H2O)	13397-24-5	<u>10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)</u>
Portland Cement	65997-15-1	<u>10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)</u>
Silica, Quartz	14808-60-7	<u>0.05 mg/m3 TWA (respirable dust)</u>

**U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)**

Gypsum (Ca(SO4).2H2O)	13397-24-5	<u>15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)</u>
Portland Cement	65997-15-1	<u>15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)</u>

**U.S. - OSHA - Vacated PELs - TWAs**

Gypsum (Ca(SO4).2H2O)	13397-24-5	<u>15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)</u>
Portland Cement	65997-15-1	<u>10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)</u>
Silica, Quartz	14808-60-7	<u>0.1 mg/m3 TWA (respirable dust)</u>

## 9. PHYSICAL & CHEMICAL PROPERTIES

**Target solids** 100 %

**pH** N/A (pH of wet product is 12.0 or greater)

**Density** 2.68 g/cc

**Odor** Mild

**Color** Various

**Physical state** Powder

**Freeze protect** No

## 10. STABILITY & REACTIVITY

**Hazardous reactions/decomposition products** Wet product has a high pH and is caustic. This product is incompatible with acids, ammonia salts, and aluminum metal.

**Stability** Stable under normal conditions.

## 11. TOXICOLOGICAL INFORMATION

**Toxicological data** If any toxicological data is available, it will be listed below:

**LD50**

**Toxicology Data - Selected LD50s and LC50s**

Silica, Quartz	14808-60-7	<u>Oral LD50 Rat: 500 mg/kg</u>
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**Chronic effects**

Chronic overexposure to Silica has been associated with the development of chronic lung disease (Silicosis) and cancer. Hexavalent chromium can cause skin sensitization, dermatitis, and cancer. Individuals already sensitized to Hexavalent chromium can have an adverse reaction to even small exposures.

## Carcinogenicity

### IARC - Group 1 (Carcinogenic to Humans)

Silica, Quartz 14808-60-7 Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources)

### NIOSH - Pocket Guide - Potential Occupational Carcinogens

Silica, Quartz 14808-60-7 potential occupational carcinogen

### NTP (National Toxicology Program) - Report on Carcinogens - Known Carcinogens

Silica, Quartz 14808-60-7 Known Carcinogen

### U.S. - OSHA - Hazard Communication Carcinogens

Silica, Quartz 14808-60-7 Present

## 12. ECOLOGICAL INFORMATION

**Ecotoxicological information** Because of the high pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

## 13. DISPOSAL CONSIDERATIONS

It is the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable local, state and federal regulations.

**Waste disposal** Dispose of in compliance with all local, state, and federal regulations.

## 14. TRANSPORT INFORMATION

### Department of Transportation (DOT) Requirements

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

## 15. REGULATORY INFORMATION

This MSDS is prepared and distributed pursuant to the Federal Hazard Communication Standard, 29 CFR 1910.1200.

**Federal regulations** All components are on the U.S. EPA TSCA Inventory List.

**State regulations** If this product contains any ingredients listed under California Proposition 65, they will be noted below:

### U.S. - California - Proposition 65 - Carcinogens List

Acetaldehyde 75-07-0 carcinogen, initial date 4/1/88 Trace impurity  
Silica, Quartz 14808-60-7 carcinogen, initial date 10/1/88 (airborne particles of respirable size)

**International regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and contains all the information required by the Controlled Products Regulations.

**HMIS Ratings** Health: 3\*  
Flammability: 0  
Physical hazard: 0  
Personal protection: X

**SARA 311/312 HAZARD CATEGORIES** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**WHMIS status** Controlled

### WHMIS labeling



**WHMIS classification** D2A - Other Toxic Effects-VERY TOXIC  
D2B - Other Toxic Effects-TOXIC  
E - Corrosive

## 16. OTHER INFORMATION

<b>Product name(s) covered</b>	D70040 - DURABOND D-60 MED SET GRAY D70050 - DURABOND D-60 MED SET WHITE
<b>Disclaimer</b>	The data in this MSDS has been compiled from publicly available sources. This data relates only to the designated product and not to the use of said product in combination with other materials. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Responsibility for proper precautions and safe use of the product lies with the user. All data in this MSDS is typical of the product as a whole, and does not represent any individual lot or batch, therefore, Bostik, Inc. makes no warranty about the accuracy of the data herein and assumes no liability for the use of such data. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.
<b>Further information</b>	Any characters following an individual item number are just designations for the various types of packaging that are available for this product. For example, a product "G12345-XX" is item number "G12345" with a packaging designation of "XX". These characters do not indicate a different product nor a different regulatory, health, safety and/or environmental status. This document covers the item numbers listed above for all of their packaging types.
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<b>Prepared by</b>	Pam Larsen
<b>Supersedes</b>	27-SEP-07