



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product name	Durabond S FTG Grout Series
Product name(s) covered	See Section 16 for Product Names Covered.
MSDS name	Durabond S FTG Grouts - Various Colors
CAS number	Mixture
Product use	Grouting Cement for Marble and Stone Tiles
Generic description	Sanded Tile Grout
Manufacturer	Bostik, Inc. 211 Boston Street Middleton, MA 01949 USA
24 hour emergency assistance	Telephone: 1-800-227-0332
General assistance	Telephone: 1-978-777-0100
MSDS assistance	Telephone: 1-414-607-1347

2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous component(s)	CAS #	Percent
Silica, Quartz	14808-60-7	40 - 70
Portland Cement	65997-15-1	15 - 40
C.I. Pigment Blue 36	68187-11-1	0 - 3
Titanium dioxide	13463-67-7	0 - 3
Gypsum (Ca(SO ₄).2H ₂ O)	13397-24-5	0 - 2
C.I. Pigment Blue 28	1345-16-0	0 - 1.5
Carbon black	1333-86-4	0 - 1
Chromium (III) oxide	1308-38-9	0 - 1
Iron oxide	1309-37-1	0 - 1

Composition comments 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 is caustic with a pH >12.0.

Chemical characterization Parts Per Million (ppm) = 0.0001%
mg/kg = 1 ppm (0.0001%)
g/kg = 1000 ppm (0.1%)
Conversion from mg/m³ to ppm: ppm = (mg/m³ / molecular weight in grams) x 24.45

3. HAZARDS IDENTIFICATION

Emergency overview 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.

Because this product is caustic when wet (pH>12.0), wet product or dry product on moist skin can potentially cause severe irritation and/or irreversible tissue damage due to chemical (caustic) burns.

Potential health effects

Skin	<p>Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis. Mechanical rubbing may increase skin irritation.</p> <p>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.</p> <p>Product is caustic when wet (pH >12.0). 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.</p>
Eyes	<p>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.</p>
Inhalation	<p>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.</p>
Ingestion	<p>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.</p>
Target organs	<p>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.</p>

4. FIRST AID MEASURES

First aid

Skin	<p>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.</p>
Eye	<p>Immediately flush with plenty of water for at least 15 minutes, holding eyelids open at all times. Get medical attention immediately.</p>
Inhalation	<p>Remove to fresh air. Get medical attention immediately for a large dose exposure or if cough or other symptoms develop.</p>
Ingestion	<p>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.</p>
Notes to physician	<p>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).</p>

5. FIRE FIGHTING MEASURES

Hazardous combustion products	<p>Non-combustible, substance itself does not burn.</p>
Extinguishing media	<p>Use any media suitable for the surrounding fires.</p>
Basic fire fighting procedures	<p>Not a fire hazard. This material will not burn. Product is caustic when wet (pH >12.0). Use personal protective equipment to prevent inhalation of airborne product and eye and skin contact with wet or dry product.</p>
Dust explosion hazard	<p>None Known</p>
Sensitivity to mechanical impact	<p>None Known</p>
Sensitivity to static discharge	<p>None Known</p>

6. ACCIDENTAL RELEASE MEASURES

Emergency action	<p>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.</p> <p>Product is caustic when wet (pH >12.0). Wear appropriate protective equipment as described in Section 8.</p>
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Reporting

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**Handling**

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.

Storage

Store in a clean, dry area. Keep containers closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Engineering controls**

Use local or general ventilation to control airborne dust below applicable exposure limits.

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

Respiratory protection is not normally required for ambient air concentrations not exceeding the Occupational Exposure Limit. If ventilation is not sufficient to effectively prevent buildup of dusts, wear appropriate NIOSH/MSHA respiratory protection.

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

C.I. Pigment Blue 28	1345-16-0	<u>0.02 mg/m3 TWA</u>
C.I. Pigment Blue 36	68187-11-1	<u>0.02 mg/m3 TWA</u>
Carbon black	1333-86-4	<u>3.5 mg/m3 TWA</u>
Chromium (III) oxide	1308-38-9	<u>0.5 mg/m3 TWA (as Cr)</u>
Gypsum (Ca(SO4).2H2O)	13397-24-5	<u>10 mg/m3 TWA (inhalable fraction, listed under Calcium sulfate)</u>
Iron oxide	1309-37-1	<u>5 mg/m3 TWA (respirable fraction)</u>
Portland Cement	65997-15-1	<u>10 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica)</u>
Silica, Quartz	14808-60-7	<u>0.025 mg/m3 TWA (respirable fraction)</u>
Titanium dioxide	13463-67-7	<u>10 mg/m3 TWA</u>

NIOSH - Pocket Guide - TWAs

C.I. Pigment Blue 28	1345-16-0	<u>0.05 mg/m3 TWA (dust and fume)</u>
C.I. Pigment Blue 36	68187-11-1	<u>0.05 mg/m3 TWA (dust and fume)</u>
Carbon black	1333-86-4	<u>3.5 mg/m3 TWA; 0.1 mg/m3 TWA (as PAH, carbon black in presence of polycyclic aromatic hydrocarbons)</u>
Chromium (III) oxide	1308-38-9	<u>0.5 mg/m3 TWA (as Cr)</u>
Gypsum (Ca(SO4).2H2O)	13397-24-5	<u>10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)</u>
Iron oxide	1309-37-1	<u>5 mg/m3 TWA (dust and fume, as Fe)</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>

OSHA - Final PELs - Time Weighted Averages (TWAs)

C.I. Pigment Blue 28	1345-16-0	<u>0.1 mg/m3 TWA (dust and fume)</u>
C.I. Pigment Blue 36	68187-11-1	<u>0.1 mg/m3 TWA (dust and fume)</u>
Carbon black	1333-86-4	<u>3.5 mg/m3 TWA</u>
Chromium (III) oxide	1308-38-9	<u>0.5 mg/m3 TWA (as Cr)</u>
Gypsum (Ca(SO4).2H2O)	13397-24-5	<u>15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)</u>
Iron oxide	1309-37-1	<u>10 mg/m3 TWA</u>
Portland Cement	65997-15-1	<u>15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)</u>
Titanium dioxide	13463-67-7	<u>15 mg/m3 TWA (total dust)</u>

OSHA - Vacated PELs - TWAs

C.I. Pigment Blue 28	1345-16-0	<u>0.05 mg/m3 TWA (dust and fume)</u>
C.I. Pigment Blue 36	68187-11-1	<u>0.05 mg/m3 TWA (dust and fume)</u>
Carbon black	1333-86-4	<u>3.5 mg/m3 TWA</u>
Chromium (III) oxide	1308-38-9	<u>0.5 mg/m3 TWA (as Cr)</u>
Gypsum (Ca(SO4).2H2O)	13397-24-5	<u>15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)</u>
Iron oxide	1309-37-1	<u>10 mg/m3 TWA (fume)</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>
Titanium dioxide	13463-67-7	<u>10 mg/m3 TWA (total dust)</u>

9. PHYSICAL & CHEMICAL PROPERTIES**Percent volatile**

0 %

pH	N.A. (pH of wet product is >12.0)
Density	2.76 g/cc
Odor	Slight
Color	Various Colors
Physical state	Powder
Freeze protect	No

10. STABILITY & REACTIVITY

Hazardous reactions/decomposition products	Wet product is alkaline (pH >12.0) and 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

C.I. Pigment Blue 28	1345-16-0	<u>Oral LD50 Rat: 6171 mg/kg</u>
C.I. Pigment Blue 36	68187-11-1	<u>Oral LD50 Rat: 6171 mg/kg</u>
Carbon black	1333-86-4	<u>Oral LD50 Rat: >15400 mg/kg; Dermal LD50 Rabbit: >3 g/kg</u>
Iron oxide	1309-37-1	<u>Oral LD50 Rat: >10000 mg/kg</u>
Silica, Quartz	14808-60-7	<u>Oral LD50 Rat: 500 mg/kg</u>
Titanium dioxide	13463-67-7	<u>Oral LD50 Rat: >10000 mg/kg</u>

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

If this product contains any carcinogens, they will be noted below:

IARC - Group 1 (Carcinogenic to Humans)

Silica, Quartz	14808-60-7	<u>Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources)</u>
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IARC - Group 2B (Possibly Carcinogenic to Humans)

C.I. Pigment Blue 28	1345-16-0	<u>Monograph 52, 1991 (Evaluated as a group)</u>
C.I. Pigment Blue 36	68187-11-1	<u>Monograph 52, 1991 (Evaluated as a group)</u>
Carbon black	1333-86-4	<u>Monograph 93 posted, Monograph 65 [1996]</u>
Titanium dioxide	13463-67-7	<u>Monograph 93 posted, Monograph 47 [1989]</u>

NIOSH - Pocket Guide - Potential Occupational Carcinogens

Carbon black	1333-86-4	<u>potential occupational carcinogen (in presence of polycyclic aromatic hydrocarbons)</u>
Silica, Quartz	14808-60-7	<u>potential occupational carcinogen</u>
Titanium dioxide	13463-67-7	<u>potential occupational carcinogen</u>

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

Silica, Quartz	14808-60-7	<u>Known Carcinogen</u>
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OSHA - Hazard Communication Carcinogens

C.I. Pigment Blue 28	1345-16-0	<u>Present</u>
C.I. Pigment Blue 36	68187-11-1	<u>Present</u>
Carbon black	1333-86-4	<u>Present</u>
Silica, Quartz	14808-60-7	<u>Present</u>
Titanium dioxide	13463-67-7	<u>Present</u>

12. ECOLOGICAL INFORMATION

Ecotoxicological information No data available for this product.

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 This product as supplied is not considered a hazardous waste under RCRA. 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.

CERCLA/SARA - Section 313 - Emission Reporting

C.I. Pigment Blue 28	1345-16-0	<u>0.1 percent de minimis concentration</u>
C.I. Pigment Blue 36	68187-11-1	<u>0.1 percent de minimis concentration</u>
Chromium (III) oxide	1308-38-9	<u>1.0 percent de minimis concentration (Chemical Category N090)</u>

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

California - Proposition 65 - Carcinogens List

C.I. Pigment Blue 28	1345-16-0	<u>carcinogen, initial date 7/1/92 (powder)</u>
C.I. Pigment Blue 36	68187-11-1	<u>carcinogen, initial date 7/1/92 (powder)</u>
Carbon black	1333-86-4	<u>carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size)</u>
Nickel	7440-02-0	<u>carcinogen, initial date 10/1/89 Trace impurity</u>
Silica, cristobalite	14464-46-1	<u>carcinogen, initial date 10/1/88 (airborne particles of respirable size)</u>
Silica, Quartz	14808-60-7	<u>carcinogen, initial date 10/1/88 (airborne particles of respirable size)</u>

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

Product name(s) covered

D92000 - Durabond S FTG White D-G01
D92100 - Durabond S FTG Natural D-G02
D92200 - Durabond S FTG Oyster D-G03
D92300 - Durabond S FTG Sandcastle D-G04
D92400 - Durabond S FTG Ocean Gray D-G05
D92500 - Durabond S FTG Storm Gray D-G06
D92600 - Durabond S FTG Haystack D-G07
D92700 - Durabond S FTG Jet Black D-G08
D92800 - Durabond S FTG Clay D-G09
D92900 - Durabond S FTG Chocolate D-G10

D93000 - Durabond S FTG Chestnut D-G11
D93100 - Durabond S FTG Oatmeal D-G12
D93200 - Durabond S FTG Chaparral D-G13
D93300 - Durabond S FTG Walnut D-G15
D93400 - Durabond S FTG Driftwood D-G16
D93500 - Durabond S FTG Canvas D-G17
D93600 - Durabond S FTG Straw D-G18
D93700 - Durabond S FTG Bone D-G19
D93800 - Durabond S FTG Seashore D-G20
D93900 - Durabond S FTG Camel D-G21
D94000 - Durabond S FTG Steel D-G22
D94100 - Durabond S FTG Platinum D-G23
D94200 - Durabond S FTG Biscuit D-G14
D94300 - Durabond S FTG Timber D-G24
D94400 - Durabond S FTG Sombrero D-G25
D94500 - Durabond S FTG Poplar D-G26
D94600 - Durabond S FTG Wedgwood D-G27
D94700 - Durabond S FTG Sunset D-G29
D94800 - Durabond S FTG Rosebeige D-G30
D94900 - Durabond S FTG Coffee D-G28
D96300 - Durabond S FTG Quarry Red D-G32
D96400 - Durabond S FTG Easy Blue D-G34
D96500 - Durabond S FTG Mint D-G35
D96600 - Durabond S FTG Cadet Blue D-G33
D96700 - Durabond S FTG Blue Bayou D-G31
D97200 - Durabond S FTG Adobe D-G49
D97300 - Durabond S FTG Birch D-G50
D98600 - Durabond S FTG Buckskin D-G36
D98700 - Durabond S FTG Carnation D-G37
D98800 - Durabond S FTG Gingko D-G38
D98900 - Durabond S FTG Beeswax D-G39
D99000 - Durabond S FTG Raisin D-G40
D99100 - Durabond S FTG Cheyenne D-G41
D99200 - Durabond S FTG Rosa Roja D-G42
D99300 - Durabond S FTG Forest Hills D-G43
D99400 - Durabond S FTG Cobblestone D-G44
D99500 - Durabond S FTG Soapstone D-G46
D99600 - Durabond S FTG Acorn D-G47
D99700 - Durabond S FTG Sundance D-G48

Disclaimer

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.

Further information

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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Prepared by

Pam Larsen

Supersedes

08/31/2006