MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product name	**CTG Grouts - Various Colors**
Product name(s) covered	See Section 16 for Product Names Covered.
MSDS name	CTG Grouts - Various Colors
CAS number	Mixture
Generic description	Hydroment Grout/Cement - All Colors
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
Iron oxide	1309-37-1	0 - 4
Titanium dioxide	13463-67-7	0 - 4
C.I. Pigment Blue 36	68187-11-1	0 - 3
C.I. Pigment Blue 28	1345-16-0	0 - 2.5
Gypsum (Ca(SO4).2H2O)	13397-24-5	0 - 2.5
Carbon black	1333-86-4	0 - 1
Chromium (III) oxide	1308-38-9	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	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. 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.
Eyes	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.
Inhalation	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.
Ingestion	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.
Target organs	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

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

Hazardous combustion products	Non-combustible, substance itself does not burn.
Extinguishing media	Use any media suitable for the surrounding fires.
Basic fire fighting procedures	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.
Dust explosion hazard	None Known
Sensitivity to mechanical impact	None Known
Sensitivity to static discharge	None Known

6. ACCIDENTAL RELEASE MEASURES

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

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	0.02 mg/m3 TWA
C.I. Pigment Blue 36	68187-11-1	0.02 mg/m3 TWA
Carbon black	1333-86-4	3.5 mg/m3 TWA
Chromium (III) oxide	1308-38-9	0.5 mg/m3 TWA (as Cr)
Iron oxide	1309-37-1	5 mg/m3 TWA (dust and fume, as Fe)
Portland Cement	65997-15-1	10 mg/m3 TWA (particulate matter containing no asbestos and < 1% crystalline silica)
Silica, Quartz	14808-60-7	0.05 mg/m3 TWA (respirable fraction)
Titanium dioxide	13463-67-7	10 mg/m3 TWA

NIOSH - Pocket Guide - TWAs

C.I. Pigment Blue 28	1345-16-0	0.05 mg/m3 TWA (dust and fume)
C.I. Pigment Blue 36	68187-11-1	0.05 mg/m3 TWA (dust and fume)
Carbon black	1333-86-4	3.5 mg/m3 TWA; 0.1 mg/m3 TWA (as PAH, carbon black in presence of polycyclic aromatic hydrocarbons)
Chromium (III) oxide	1308-38-9	0.5 mg/m3 TWA (as Cr)
Gypsum (Ca(SO4).2H2O)	13397-24-5	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
Iron oxide	1309-37-1	5 mg/m3 TWA (dust and fume, as Fe)
Portland Cement	65997-15-1	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
Silica, Quartz	14808-60-7	0.05 mg/m3 TWA (respirable dust)

OSHA - Final PELs - Time Weighted Averages (TWAs)

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

OSHA - Vacated PELs - TWAs

C.I. Pigment Blue 28	1345-16-0	0.05 mg/m3 TWA (dust and fume)
C.I. Pigment Blue 36	68187-11-1	0.05 mg/m3 TWA (dust and fume)
Carbon black	1333-86-4	3.5 mg/m3 TWA
Chromium (III) oxide	1308-38-9	0.5 mg/m3 TWA (as Cr)
Gypsum (Ca(SO4).2H2O)	13397-24-5	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Iron oxide	1309-37-1	10 mg/m3 TWA (fume)
Portland Cement	65997-15-1	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
Silica, Quartz	14808-60-7	0.1 mg/m3 TWA (respirable dust)
Titanium dioxide	13463-67-7	10 mg/m3 TWA (total dust)

9. PHYSICAL & CHEMICAL PROPERTIES

Percent volatile 0 %

pH N.A. (pH of wet product is >12.0)

Density 2.78 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	Oral LD50 Rat: 6171 mg/kg
C.I. Pigment Blue 36	68187-11-1	Oral LD50 Rat: 6171 mg/kg
Carbon black	1333-86-4	Oral LD50 Rat: >15400 mg/kg; Dermal LD50 Rabbit: >3 g/kg
Iron oxide	1309-37-1	Oral LD50 Rat: >10000 mg/kg
Silica, Quartz	14808-60-7	Oral LD50 Rat: 500 mg/kg
Titanium dioxide	13463-67-7	Oral LD50 Rat: >10000 mg/kg

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	Monograph 68, 1997 (listed under Crystalline silica, inhaled in the form of quartz or cristobalite from occupational sources)

IARC - Group 2B (Possibly Carcinogenic to Humans)

C.I. Pigment Blue 28	1345-16-0	Monograph 52, 1991 (Evaluated as a group)
C.I. Pigment Blue 36	68187-11-1	Monograph 52, 1991 (Evaluated as a group)
Carbon black	1333-86-4	Monograph 65, 1996

NIOSH - Pocket Guide - Potential Occupational Carcinogens

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

OSHA - Hazard Communication Carcinogens

C.I. Pigment Blue 28	1345-16-0	Present
C.I. Pigment Blue 36	68187-11-1	Present
Carbon black	1333-86-4	Present
Silica, Quartz	14808-60-7	Present

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	0.1 percent de minimis concentration
C.I. Pigment Blue 36	68187-11-1	0.1 percent de minimis concentration
Chromium (III) oxide	1308-38-9	1.0 percent de minimis concentration (Chemical Category N090)

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	carcinogen, initial date 7/1/92 (powder)
C.I. Pigment Blue 36	68187-11-1	carcinogen, initial date 7/1/92 (powder)
Carbon black	1333-86-4	carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size)
Lead	7439-92-1	carcinogen, initial date 10/1/92 Trace impurity
Nickel	7440-02-0	carcinogen, initial date 10/1/89 Trace impurity
Silica, cristobalite	14464-46-1	carcinogen, initial date 10/1/88 (airborne particles of respirable size)
Silica, Quartz	14808-60-7	carcinogen, initial date 10/1/88 (airborne particles of respirable size)

California - Proposition 65 - Developmental Toxicity

Lead	7439-92-1	developmental toxicity, initial date 2/27/87 Trace impurity

California - Proposition 65 - Reproductive Toxicity - Female

Lead	7439-92-1	female reproductive toxicity, initial date 2/27/87 Trace impurity

California - Proposition 65 - Reproductive Toxicity - Male

Lead	7439-92-1	male reproductive toxicity, initial date 2/27/87 Trace impurity

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

G00611 - CTG White H152
G00620 - CTG Copper Canyon H140
G00621 - CTG Summer Wheat H150
G00622 - CTG Latte H192
G00623 - CTG Straw Amber
G00624 - CTG Cashmere H178
G00625 - CTG Sand Beige H148

G00627 - CTG Flash Walnut H141
G00628 - CTG Brown H137
G00641 - CTG Brick H136
G00649 - CTG Smoke Wood H149
G00661 - CTG Misty Gray H144
G00664 - CTG Natural H146
G00666 - CTG Shadow H195
G00668 - CTG French Gray H142
G00670 - CTG Antque White H135
G00672 - CTG Champagne H138
G00673 - CTG Mobe Pearl H145
G00674 - CTG Bamboo H179
G00675 - CTG Taupe H151
G00676 - CTG Kahlua Cream H143
G00677 - CTG Peaches & Cream H147
G00684 - CTG Char Black H139
G96108 - CTG Cameo H156
G96113 - CTG Cranes Beach H159
G96114 - CTG Classic Bone H158
G96115 - CTG Bright White H177
G96116 - CTG Buff H188
G96265 - CTG Almond H153
G96284 - CTG Jamoca H162
G96289 - CTG Portabella H184
G96290 - CTG Sedona H190
G96291 - CTG Khaki H187
G96329 - CTG Sea Breeze H174
G96331 - CTG Anastasia Emerald H169
G96332 - CTG Myst H165
G96333 - CTG Teal H176
G96334 - CTG Aspen Mint H154
G96335 - CTG Essex Green H170
G96337 - CTG Avocado H180
G96338 - CTG Woodlands H194
G96435 - CTG Blush H155
G96446 - CTG Nordic Orchid H182
G96447 - CTG Rousillion Red H186
G96448 - CTG Twilight H193
G96514 - CTG Panache Blue H173
G96522 - CTG Heron Blue H171
G96525 - CTG Stormy Blue H175
G96526 - CTG Midnight Blue H172
G96527 - CTG Ice Blue H161
G96528 - CTG Windsor H191
G96635 - CTG Delorean Gray H160
G96648 - CTG Silver Bullet H168
G96741 - CTG Linen H163
G96745 - CTG Plum H166
G96747 - CTG Sandstone H167
G96749 - CTG Moon Dust H164
G96755 - CTG Caribbean Coral H157
G96756 - CTG Sand Dune H181
G96757 - CTG Alpine White H183
G96758 - CTG Ivory Palace H185
G96759 - CTG Alabaster H189

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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Supercedes	06/27/2006