

Material Safety Data Sheet



BORDER 227 CONSTRUCTION GROUT

Version 1.1

12/19/06

1. PRODUCT AND COMPANY INFORMATION

Company	BCS 4502 E. University Dr. Phoenix, AZ 85034
	889 Valley Park Drive Skakopee, MN 55379
Telephone	877-426-7337 952-496-6000
Emergency Telephone Number	800-424-9300 703-527-3887 (Outside Continental US)
Product Name	Border 227 Construction Grout
MSDS ID No.	10329
TSCA Inventory	All components of this product are included, or are exempt from inclusion, in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
Canadian DSL	All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List (DSL).

2. HAZARDOUS INGREDIENTS

Chemical	CAS No.	TLV	STEL	PEL	CEIL	Weight %
SILICA, CRYSTALLINE QUARTZ	14808-60-7	0.05 mg/m3	N.E.	5 mg/m3	N.E.	40.00 - 70.00 %
PORTLAND CEMENT	65997-15-1	10 mg/m3	N.E.	5 mg/m3	N.E.	15.00 - 40.00 %
LIMESTONE	1317-65-3	5 mg/m3	N.E.	5 mg/m3	N.E.	1.00 - 10.00 %
CALCIUM OXIDE	1305-78-8	2 mg/m3	N.E.	5 mg/m3	N.E.	1.00 - 5.00 %
GYPSUM	13397-24-5	5 mg/m3	N.E.	5 mg/m3	N.E.	1.00 - 5.00 %
SILICA, AMORPHOUS	7631-86-9	3 mg/m3	N.E.	N.E.	N.E.	0.00 - 5.00 %

3. HAZARDS IDENTIFICATION

HMIS® Rating	HEALTH 2*	FLAMMABILITY 0	PHYSICAL HAZARD 1
WHMIS Class	D2B E		
Primary Routes of Entry	Inhalation Ingestion Eye contact Skin Contact		

Effects of Overexposure

Material Safety Data Sheet



BORDER 227 CONSTRUCTION GROUT

Version 1.1

03/28/06

Inhalation	Inhalation of dust can cause coughing and labored breathing and possible temporary but reversible irritation on mucous membranes and respiratory tract.
Skin	Can cause slight to moderate irritation due to abrasive action. In combination with water, repeated or prolonged dermal exposure can cause moderate to severe alkali burns.
Eyes	Can cause severe irritation, redness, tearing and blurred vision. Prolonged or repeated contact can cause burns and possibly corneal injury.
Ingestion	Irritating to mouth, throat and stomach
Chronic exposure	This product contains Crystalline (quartz) Silica which has been listed as a human carcinogen by NTP (Group 1) and IARC (Human Carcinogen) and a Suspected Human Carcinogen by ACGIH (category A2). Repeated or prolonged over exposure to free respirable Crystalline (quartz) silica can cause silicosis or other delayed and serious lung injury. Repeated or prolonged overexposure to free respirable silica can cause silicosis or other delayed and serious lung injury.

Carcinogenicity	ACGIH	IARC	NTP	OSHA
SILICA, CRYSTALLINE QUARTZ	Suspected human carcinogen	Human carcinogen	Known carcinogen	N.E.
PORTLAND CEMENT	N.E.	N.E.	N.E.	N.E.
LIMESTONE	N.E.	N.E.	N.E.	N.E.
CALCIUM OXIDE	N.E.	N.E.	N.E.	N.E.
GYPSUM	N.E.	N.E.	N.E.	N.E.
SILICA, AMORPHOUS	N.E.	Classification not possible from current data.	N.E.	N.E.

4. FIRST AID MEASURES

Eye Contact	Flush eyes with water, lifting upper and lower lids occasionally for 15 minutes. Seek medical attention
Skin Contact	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Seek medical advice.
Ingestion	Do not induce vomiting without medical advice. If conscious, drink plenty of water. Call a physician immediately. Never give anything by mouth to an unconscious person. If a person vomits, place him/her in the recovery position.
Inhalation	Remove victim from exposure. If difficulty with breathing, administer oxygen. If breathing has stopped administer artificial respiration, preferably mouth – to – mouth. Seek immediate medical attention.

5. FIRE-FIGHTING MEASURES

Flash point	Not combustible
Autoignition temperature	Not combustible
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Suitable extinguishing media	water fog Carbon dioxide (CO2) Dry chemical

Material Safety Data Sheet



BORDER 227 CONSTRUCTION GROUT

Version 1.1

03/28/06

	Alcohol-resistant foam
Fire and Explosion Hazards	This product is alkaline and releases considerable heat on contact with small amounts of water. Avoid contact between resulting hot alkaline paste and metallic aluminum. Such contact could generate hydrogen gas.
Special Fire-fighting Procedures	As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up	Clean up promptly by sweeping or vacuum. Clean thoroughly. After cleaning, flush away traces with water. Keep in suitable, closed containers for disposal. Wear personal protective equipment.
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7. HANDLING AND STORAGE

Handling	Use only in area provided with appropriate ventilation. Keep out of reach of children. Avoid exceeding of the given occupational exposure limits (see section 2). Avoid formation of respirable particles.
Storage	Keep container tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye protection	Wear as appropriate: Safety glasses with side-shutters Face –shield Goggles
Hand protection	Wear as appropriate Impervious gloves
Body protection	Wear as appropriate Preventative skin protection Impervious clothing
Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Hygienic Practices	Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.
Engineering Controls	Local exhaust ventilation can be necessary to control any air contaminants to within their TVLs during the use of this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color	grey
Physical State	powder

Material Safety Data Sheet



BORDER 227 CONSTRUCTION GROUT

Version 1.1

03/28/06

Odor	none
pH (at 100%)	not applicable
Odor Threshold	no data available
Vapor Pressure	not applicable
Vapor Density	not applicable
Boiling point/range	not applicable
Freeze Point	not applicable
Water solubility	slightly soluble
Specific Gravity	no data available
Viscosity	not applicable
Evaporation rate	no data available
Partition coefficient (noctanol/water)	no data available
VOC Concentration as applied (less water and exempt solvents)	0/gal

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Conditions to avoid	no data available
Materials to avoid	strong acids and strong bases strong oxidizing bases
Hazardous decomposition products	no data available
Hazardous polymerization	Will not occur under normal conditions.

11. TOXICOLOGICAL INFORMATION

Acute inhalation toxicity

<u>Product</u>	<u>Type</u>	<u>Value</u>	<u>Species</u>	<u>Exposure time</u>
<u>Component</u>				
SILICA, CRYSTALLIZE QUARTZ	LC50	no data available		
PORTLAND CEMENT	LC50	no data available		
LIMESTONE	LC50	no data available		
CALCIUM OXIDE	LC50	no data available		
GYPSUM	LC50	no data available		
SILICA, AMORPHOUS	LC50	no data available		

Acute oral toxicity

<u>Type</u>	<u>Value</u>	<u>Species</u>
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Material Safety Data Sheet



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Version 1.1

03/28/06

This product contains no chemicals subject to the SARA 313 supplier notification requirements.

CERCLA

CERCLA section 103(a) specifically requires the person in charge of a vessel or facility to report immediately to the National Response Center (NRC) a release of a hazardous substance whose amount equals or exceeds the assigned RQ. The following hazardous substances are contained in this product.

<u>RQ</u>	<u>CAS No.</u>	<u>Chemical Name</u>
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No CERCLA chemicals exist in this product above reportable concentrations.

TSCA Section 12(b) Export Notification

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

<u>CAS No.</u>	<u>Chemical Name</u>

There are no TSCA 12(b) Chemicals in this product.

California Proposition 65

The chemical(s) noted below and contained in the product, are known to the state of California to cause cancer, birth defects or other reproductive harm. Unless otherwise specified in Section 2 of this MSDS, these chemicals are present at <0.1%

<u>CAS No.</u>	<u>Chemical Name</u>
14808-60-7	SILICA, CRYSTALLINE QUARTZ
1333-86-4	CARBON BLACK

16. OTHER INFORMATION

Legend

N.E. – Not Established
TLV – Threshold Limit Value
STEL – Short Term Exposure Limit
PEL - Permissible Exposure Limit
CEIL – Ceiling

Prepared by

Environment, Health and Safety Department

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End of MSDS>