SAFETY DATA SHEET

1. Product and Company Identification

Product identifier	***Pro Stone***
Other means of identification	Not available
Recommended use	Modelling Clay
Recommended restrictions	None known.
Manufacturer information	Tucker's Pottery Supplies Inc., Cone Art Kilns Inc. 15 West Pearce Street Richmond Hill, ON L4B 1H6 CA Phone: Toll Free 1-800-304-6185 Phone: 905-889-7705 Emergency Phone Number: 613-996-6666 (CANUTEC)
Supplier	See above.

2. Hazards Identification

Physical hazards	Not classified.	
Health hazards	Serious eye damage/eye irritation	Category 2
	Carcinogenicity	Category 1A
	Specific target organ toxicity, repeated exposure	Category 1
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	
Label elements		

Signal word	Danger
Hazard statement	Causes serious eye irritation. May cause cancer. Causes damage to organs through prolonged or repeated exposure.
Precautionary statement	
Prevention	Do not handle until all safety precautions have been read and understood. Do not breathe dust. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Kaolin		1332-58-7	45
Crystalline silica		14808-60-7	18
Kyanite		1302-76-7	7
Cristobalite		14464-46-1	6
Feldspar		68476-25-5	6
Silica		7631-86-9	5
Nepheline syenite		37244-96-5	4
Kaolinite		1318-74-7	3
Titanium oxide		13463-67-7	0.5
Rutile		1317-80-2	0.4

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

Inhalation
If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Skin contact
Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

Eye contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion
Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing. Obtain medical attention.

Most important symptoms/effects, acute and delayed
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Dusts may irritate the respiratory tract, skin and eyes. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

General information
IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Carbon dioxide.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions
Use water spray to cool unopened containers.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards
No unusual fire or explosion hazards noted.

Hazardous combustion products
May include and are not limited to: Hydrofluoric acid. Silicon tetrafluoride.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters.

7. Handling and Storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide appropriate exhaust ventilation at places where dust is formed. Avoid contact with eyes. When using, do not eat, drink or smoke. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. When using do not eat or drink.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable particles.
		0.025 mg/m3	Respirable.
Crystalline silica (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable particles.
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable.
Rutile (CAS 1317-80-2)	TWA	10 mg/m3	
Titanium oxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
Crystalline silica (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable.
Kaolinite (CAS 1318-74-7)	TWA	1 mg/m3	Respirable.
Kyanite (CAS 1302-76-7)	TWA	1 mg/m3	Respirable.
Rutile (CAS 1317-80-2)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.
Silica (CAS 7631-86-9)	TWA	4 mg/m3	Total
		1.5 mg/m3	Respirable.
Titanium oxide (CAS 13463-67-7)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
Crystalline silica (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
Kaolinite (CAS 1318-74-7)	TWA	1 mg/m3	Respirable fraction.
Kyanite (CAS 1302-76-7)	TWA	1 mg/m3	Respirable fraction.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Rutile (CAS 1317-80-2)	TWA	10 mg/m3	
Titanium oxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable fraction.
Crystalline silica (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable fraction.
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
Kaolinite (CAS 1318-74-7)	TWA	1 mg/m3	Respirable fraction.
Kyanite (CAS 1302-76-7)	TWA	1 mg/m3	Respirable fraction.
Nepheline syenite (CAS 37244-96-5)	TWA	10 mg/m3	Total dust.
Rutile (CAS 1317-80-2)	TWA	10 mg/m3	
Titanium oxide (CAS 13463-67-7)	TWA	10 mg/m3	

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0.05 mg/m3	Total dust.
Crystalline silica (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable dust.
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable dust.
Rutile (CAS 1317-80-2)	TWA	10 mg/m3	Total dust.
Silica (CAS 7631-86-9)	TWA	6 mg/m3	Respirable dust.
Titanium oxide (CAS 13463-67-7)	TWA	10 mg/m3	Total dust.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	PEL	0.05 mg/m3	Respirable dust.
Crystalline silica (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.
Kaolin (CAS 1332-58-7)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Rutile (CAS 1317-80-2)	PEL	15 mg/m3	Total dust.
Titanium oxide (CAS 13463-67-7)	PEL	15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable.
		1.2 mppcf	Respirable.
Crystalline silica (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Silica (CAS 7631-86-9)	TWA	0.8 mg/m3	
		20 mppcf	
Titanium oxide (CAS 13463-67-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
		15 mppcf	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Cristobalite (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction.
Crystalline silica (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
Kaolinite (CAS 1318-74-7)	TWA	1 mg/m3	Respirable fraction.
Kyanite (CAS 1302-76-7)	TWA	1 mg/m3	Respirable fraction.
Rutile (CAS 1317-80-2)	TWA	10 mg/m3	
Titanium oxide (CAS 13463-67-7)	TWA	10 mg/m3	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Crystalline silica (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3 10 mg/m3	Respirable. Total
Silica (CAS 7631-86-9)	TWA	6 mg/m3	

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Impervious gloves. Confirm with reputable supplier first.

Other Wear suitable protective clothing. Use of an impervious apron is recommended. As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

Thermal hazards Not applicable.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance	Moist mud
Physical state	Solid.
Form	Solid.
Color	Grey
Odor	Earthy
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	Not available
Specific gravity	Not available.

Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Powerful oxidizers. Chlorine.
Hazardous decomposition products	May include and are not limited to: Silicon tetrafluoride. Hydrofluoric acid.

11. Toxicological Information

Routes of exposure	Eye, Skin contact, Inhalation, Ingestion.
Information on likely routes of exposure	
Ingestion	May cause stomach distress, nausea or vomiting.
Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity

Components	**Species**	**Test Results**
Cristobalite (CAS 14464-46-1)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg, 24 Hours, ECHA
		> 2000 mg/kg, 24 Hours
Inhalation		
LC50	Not available	
Oral		
LD50	Mouse	> 15000 mg/kg, HSDB

Components	Species	Test Results
	Rat	> 22500 mg/kg, HSDB
Crystalline silica (CAS 14808-60-7)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Not available	
Oral		
LD50	Rat	500 mg/kg, HSDB, IV only
Feldspar (CAS 68476-25-5)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Not available	
Oral		
LD50	Not available	
Kaolin (CAS 1332-58-7)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg, HSDB
Inhalation		
LC50	Not available	
Oral		
LD50	Rat	> 5000 mg/kg, HSDB
		14900 mg/kg, Gelest
Kyanite (CAS 1302-76-7)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Not available	
Oral		
LD50	Not available	
Nepheline syenite (CAS 37244-96-5)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Not available	
Oral		
LD50	Not available	
Rutile (CAS 1317-80-2)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Rat	> 6.8 mg/L, 4 Hours, ECHA
		> 3.6 mg/L, 4 Hours, ECHA
		> 2.3 mg/L, 4 Hours, ECHA
		5.1 mg/L, 4 Hours, ECHA
		3.4 mg/L, 4 Hours, ECHA

Components	Species	Test Results
Oral		
LD50	Rat	> 25000 mg/kg, ECHA
		> 11000 mg/kg, ECHA
		> 5000 mg/kg, ECHA
		> 2000 mg/kg, ECHA
Silica (CAS 7631-86-9)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
		> 2000 mg/kg, 24 Hours
Inhalation		
LC50	Not available	
	Rat	> 2.1 mg/L, 4 Hours
Oral		
LD50	Mouse	> 3160 mg/kg
	Rat	> 5000 mg/kg
		> 3300 mg/kg
Titanium oxide (CAS 13463-67-7)		
Acute		
Dermal		
LD50	Not available	
Inhalation		
LC50	Rat	> 6.8 mg/L, 4 Hours, ECHA
		> 3.6 mg/l/4h, ECHA
		> 3.6 mg/L, 4 Hours, ECHA
		> 2.3 mg/L, 4 Hours, ECHA
		5.1 mg/L, 4 Hours, ECHA
		3.4 mg/L, 4 Hours, ECHA
Oral		
LD50	Mouse	> 5000 mg/kg, ECHA
	Rat	> 25000 mg/kg, ECHA
		> 11000 mg/kg, ECHA
		> 5000 mg/kg, ECHA
		> 2000 mg/kg, ECHA

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Exposure minutes	Not available.
Erythema value	Not available.
Oedema value	Not available.
Serious eye damage/eye irritation	Causes serious eye irritation.
Corneal opacity value	Not available.
Iris lesion value	Not available.
Conjunctival reddening value	Not available.
Conjunctival oedema value	Not available.
Recover days	Not available.
Respiratory or skin sensitization	
Canada - Alberta OELs: Irritant	
Cristobalite (CAS 14464-46-1)	Irritant
Rutile (CAS 1317-80-2)	Irritant
Titanium oxide (CAS 13463-67-7)	Irritant
Respiratory sensitization	Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity May cause cancer.
In 1997, IARC (the International Agency for Research on Cancer) concluded that crystalline silica inhaled from occupational sources can cause lung cancer in humans. However in making the overall evaluation, IARC noted that "carcinogenicity was not detected in all industrial circumstances studied. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." (IARC Monographs on the evaluation of the carcinogenic risks of chemicals to humans, Silica, silicates dust and organic fibres, 1997, Vol. 68, IARC, Lyon, France.)
In June 2003, SCOEL (the EU Scientific Committee on Occupational Exposure Limits) concluded that the main effect in humans of the inhalation of respirable crystalline silica dust is silicosis. "There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and, apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore, preventing the onset of silicosis will also reduce the cancer risk..." (SCOEL SUM Doc 94-final, June 2003)
According to the current state of the art, worker protection against silicosis can be consistently assured by respecting the existing regulatory occupational exposure limits.
Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.
High concentrations of pigment-grade (powdered) and ultrafine titanium dioxide (titanium oxide) dust have caused respiratory tract cancer in rats exposed by inhalation and intratracheal instillation.

ACGIH Carcinogens

Cristobalite (CAS 14464-46-1)	A2 Suspected human carcinogen.
Crystalline silica (CAS 14808-60-7)	A2 Suspected human carcinogen.

Canada - Alberta OELs: Carcinogen category

Cristobalite (CAS 14464-46-1)	Suspected human carcinogen.
Crystalline silica (CAS 14808-60-7)	Suspected human carcinogen.

Canada - Manitoba OELs: carcinogenicity

SILICA, CRYSTALLINE-.ALPHA.-QUARTZ, RESPIRABLE FRACTION (CAS 14808-60-7)	Suspected human carcinogen.
SILICA, CRYSTALLINE-CRISTOBALITE, RESPIRABLE FRACTION (CAS 14464-46-1)	Suspected human carcinogen.

Canada - Quebec OELs: Carcinogen category

Cristobalite (CAS 14464-46-1)	Detected carcinogenic effect in animals.
Crystalline silica (CAS 14808-60-7)	Suspected carcinogenic effect in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Cristobalite (CAS 14464-46-1)	Volume 68, Volume 100C 1 Carcinogenic to humans.
Crystalline silica (CAS 14808-60-7)	Volume 68, Volume 100C 1 Carcinogenic to humans.
Hydrous magnesium silicate (CAS 14807-96-6)	Volume 42, Supplement 7, Volume 93 - 3 Not classifiable as to carcinogenicity to humans. Volume 93 - 2B Possibly carcinogenic to humans.
Rutile (CAS 1317-80-2)	Volume 47, Volume 93 - 2B Possibly carcinogenic to humans.
Silica (CAS 7631-86-9)	Volume 68 - 3 Not classifiable as to carcinogenicity to humans.
Titanium oxide (CAS 13463-67-7)	Volume 47, Volume 93 - 2B Possibly carcinogenic to humans.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Crystalline silica (CAS 14808-60-7)
Rutile (CAS 1317-80-2)
Titanium oxide (CAS 13463-67-7)

US NTP Report on Carcinogens: Anticipated carcinogen

Cristobalite (CAS 14464-46-1)	Reasonably Anticipated to be a Human Carcinogen.

US NTP Report on Carcinogens: Known carcinogen

Cristobalite (CAS 14464-46-1)	Known To Be Human Carcinogen.
Crystalline silica (CAS 14808-60-7)	Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Cristobalite (CAS 14464-46-1)	Cancer
Crystalline silica (CAS 14808-60-7)	Cancer

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Teratogenicity Not available.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard Not an aspiration hazard.

Chronic effects Causes damage to organs through prolonged or repeated exposure. Prolonged or repeated exposure to fine airborne crystalline silica dust may cause severe scarring of the lungs, a disease called silicosis. Early symptoms of silicosis include cough, mucous production and shortness of breath upon exertion.

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data

Components		Species	Test Results
Rutile (CAS 1317-80-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/L, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/L, 96 hours
Silica (CAS 7631-86-9)			
Algae	IC50	Algae	440 mg/L, 72 Hours
Crustacea	EC50	Daphnia	7600 mg/L, 48 Hours
Titanium oxide (CAS 13463-67-7)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/L, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/L, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Mobility in general Not available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal Considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

Transport of Dangerous Goods (TDG) Proof of Classification In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue.

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada CEPA Schedule I: Listed substance

Cristobalite (CAS 14464-46-1)	Listed.
Hydrous magnesium silicate (CAS 14807-96-6)	Listed.
Kaolin (CAS 1332-58-7)	Listed.
Mica group minerals (CAS 12001-26-2)	Listed.
Titanium oxide (CAS 13463-67-7)	Listed.

Canada DSL Challenge Substances: Listed substance

Cristobalite (CAS 14464-46-1)	Listed.
Crystalline silica (CAS 14808-60-7)	Listed.

Canada Priority Substances List (Second List): Listed substance

Hydrous magnesium silicate (CAS 14807-96-6)	Listed.
Kaolin (CAS 1332-58-7)	Listed.
Mica group minerals (CAS 12001-26-2)	Listed.
Titanium oxide (CAS 13463-67-7)	Listed.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Barium carbonate (CAS 513-77-9)	Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Cristobalite (CAS 14464-46-1)	Cancer
Crystalline silica (CAS 14808-60-7)	Cancer
Cristobalite (CAS 14464-46-1)	lung effects
Crystalline silica (CAS 14808-60-7)	lung effects
Cristobalite (CAS 14464-46-1)	immune system effects
Crystalline silica (CAS 14808-60-7)	immune system effects
Cristobalite (CAS 14464-46-1)	kidney effects
Crystalline silica (CAS 14808-60-7)	kidney effects

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations See below

US - California Hazardous Substances (Director's): Listed substance

Barium carbonate (CAS 513-77-9)	Listed.
Hydrous magnesium silicate (CAS 14807-96-6)	Listed.
Mica group minerals (CAS 12001-26-2)	Listed.
Silica (CAS 7631-86-9)	Listed.

US - Illinois Chemical Safety Act: Listed substance

Barium carbonate (CAS 513-77-9)

US - Minnesota Haz Subs: Listed substance

Barium carbonate (CAS 513-77-9)	Listed.
Cristobalite (CAS 14464-46-1)	Listed.
Crystalline silica (CAS 14808-60-7)	Listed.
Hydrous magnesium silicate (CAS 14807-96-6)	Listed.
Kaolin (CAS 1332-58-7)	Listed.
Mica group minerals (CAS 12001-26-2)	Listed.
Rutile (CAS 1317-80-2)	Listed.
Silica (CAS 7631-86-9)	Listed.
Titanium oxide (CAS 13463-67-7)	Listed.

US - New Jersey RTK - Substances: Listed substance

Barium carbonate (CAS 513-77-9)
Cristobalite (CAS 14464-46-1)
Crystalline silica (CAS 14808-60-7)
Hydrous magnesium silicate (CAS 14807-96-6)
Kaolin (CAS 1332-58-7)
Mica group minerals (CAS 12001-26-2)
Rutile (CAS 1317-80-2)
Silica (CAS 7631-86-9)
Titanium oxide (CAS 13463-67-7)

US - Texas Effects Screening Levels: Listed substance

Barium carbonate (CAS 513-77-9)	Listed.
Cristobalite (CAS 14464-46-1)	Listed.
Crystalline silica (CAS 14808-60-7)	Listed.
Feldspar (CAS 68476-25-5)	Listed.
Hydrous magnesium silicate (CAS 14807-96-6)	Listed.
Kaolin (CAS 1332-58-7)	Listed.
Kyanite (CAS 1302-76-7)	Listed.
Mica group minerals (CAS 12001-26-2)	Listed.
Nepheline syenite (CAS 37244-96-5)	Listed.
Rutile (CAS 1317-80-2)	Listed.
Silica (CAS 7631-86-9)	Listed.
Titanium oxide (CAS 13463-67-7)	Listed.

US. Massachusetts RTK - Substance List

Cristobalite (CAS 14464-46-1)
Crystalline silica (CAS 14808-60-7)
Hydrous magnesium silicate (CAS 14807-96-6)
Kaolin (CAS 1332-58-7)
Mica group minerals (CAS 12001-26-2)
Rutile (CAS 1317-80-2)
Silica (CAS 7631-86-9)
Titanium oxide (CAS 13463-67-7)

US. New Jersey Worker and Community Right-to-Know Act

Barium carbonate (CAS 513-77-9)

US. Pennsylvania Worker and Community Right-to-Know Law

Barium carbonate (CAS 513-77-9)
Cristobalite (CAS 14464-46-1)
Crystalline silica (CAS 14808-60-7)
Hydrous magnesium silicate (CAS 14807-96-6)
Kaolin (CAS 1332-58-7)
Mica group minerals (CAS 12001-26-2)
Rutile (CAS 1317-80-2)
Silica (CAS 7631-86-9)
Titanium oxide (CAS 13463-67-7)

US. Rhode Island RTK

Barium carbonate (CAS 513-77-9)
Cristobalite (CAS 14464-46-1)
Crystalline silica (CAS 14808-60-7)
Hydrous magnesium silicate (CAS 14807-96-6)
Kaolin (CAS 1332-58-7)
Mica group minerals (CAS 12001-26-2)
Rutile (CAS 1317-80-2)
Titanium oxide (CAS 13463-67-7)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Crystalline silica (CAS 14808-60-7)	Listed: October 1, 1988
Rutile (CAS 1317-80-2)	Listed: September 2, 2011
Titanium oxide (CAS 13463-67-7)	Listed: September 2, 2011

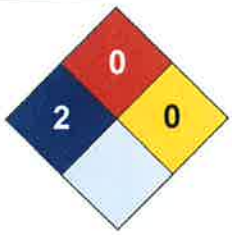
Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0



Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date 20-February-2018

Version # 01

Effective date 20-February-2018

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Other information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.