

## Safety Data Sheet



## Section 1: Identification

## Product identifier

**Product Name** | Reno Gun CX  
**Product Code** | 127600

## Relevant identified uses of the substance or mixture and uses advised against

**Recommended use** | Refractory applications

## Details of the supplier of the safety data sheet

**Manufacturer** | Reno Refractories, Inc.  
 PO Box 201  
 Morris, AL 35116  
 United States  
 www.renorefractories.com  
 sales@renorefractories.com  
**Telephone (General)** | 205-647-0240

## Emergency telephone number

**Manufacturer** | 1-800-262-8200 - CHEMTREC

## Section 2: Hazard Identification

## United States (US)

According to OSHA 29 CFR 1910.1200 HCS

## Classification of the substance or mixture

**OSHA HCS 2012** | Skin Sensitization 1 - H317  
 Carcinogenicity 1A - H350  
 Specific Target Organ Toxicity Repeated Exposure 1 - H372

## Label elements

**OSHA HCS 2012**

**DANGER**

**Hazard statements** | May cause an allergic skin reaction - H317  
 May cause cancer. - H350  
 Causes damage to organs through prolonged or repeated exposure. - H372

## Precautionary statements

**Prevention** | Obtain special instructions before use. - P201  
 Do not handle until all safety precautions have been read and understood. - P202

- Do not breathe dust. - P260  
 Wash thoroughly after handling. - P264  
 Do not eat, drink or smoke when using this product. - P270  
 Contaminated work clothing should not be allowed out of the workplace. - P272  
 Wear protective gloves, clothing, and eye/face protection, . - P280
- Response** | If on skin: Wash with plenty of water .  
 Specific treatment, see supplemental first aid information. - P321  
 Wash contaminated clothing before reuse. - P363  
 If skin irritation or rash occurs: Get medical advice/attention. - P333+P313  
 IF exposed or concerned: Get medical advice/attention. - P308+P313  
 Get medical advice/attention if you feel unwell. - P314
- Storage/Disposal** | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. - P501

## Other hazards

- OSHA HCS 2012** | Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

## Canada

According to WHMIS

## Classification of the substance or mixture

- WHMIS** | Other Toxic Effects - D2A  
 Other Toxic Effects - D2B

## Label elements

**WHMIS**



- | Other Toxic Effects - D2A  
 Other Toxic Effects - D2B

## Other hazards

- WHMIS** | In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

## Section 3 - Composition/Information on Ingredients

### Substances

- | Material does not meet the criteria of a substance.

### Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Quartz	CAS:14808-60-7	8.96% TO 19.069%	NDA	OSHA HCS 2012: Carc. 1A; STOT RE 1 (Lungs);	NDA
Mullite	CAS:1302-93-8	16.25% TO 18.85%	NDA	OSHA HCS 2012: STOT RE 2 (Lungs)	NDA
Silicon carbide	CAS:409-21-2	9.49% TO 16%	NDA	OSHA HCS 2012: STOT RE 2	NDA

Graphite	CAS:7782-42-5	12% TO 16%	NDA	OSHA HCS 2012: STOT RE 1 (Lungs, Inhl)	NDA
Gilsonite	CAS:12002-43-6	12% TO 16%	NDA	OSHA HCS 2012: Skin Sens. 1	NDA
Clay	Proprietary	7% TO 11.7%	NDA	OSHA HCS 2012: Not Classified	NDA
Cristobalite	CAS:14464-46-1	3.78% TO 7.34%	NDA	OSHA HCS 2012: Carc. 1A	NDA
Silica, amorphous	CAS:7631-86-9	2.725% TO 6.49%	NDA	OSHA HCS 2012: Not Classified	NDA
Bauxite	CAS:1318-16-7	2.64% TO 5.28%	NDA	OSHA HCS 2012: STOT RE 2 (Lungs);	NDA
Bentonite	CAS:1302-78-9	0.6% TO 3%	NDA	OSHA HCS 2012: STOT RE 2 (Lungs)	NDA
Aluminum sulfate (2:3)	CAS:10043-01-3	0.57% TO 2.4%	NDA	OSHA HCS 2012: STOT RE 3: Resp. Irrit.; Eye Irrit. 2;	NDA
Titanium dioxide	CAS:13463-67-7	0.0975% TO 0.195%	NDA	OSHA HCS 2012: Carc. 2;	NDA
Iron oxide	CAS:1309-37-1	0.06% TO 0.12%	NDA	OSHA HCS 2012: Not Classified	NDA
Silica, crystalline - tridymite	CAS:15468-32-3	0% TO 0.03%	NDA	OSHA HCS 2012: Exposure limits	NDA

## Section 4: First-Aid Measures

### Description of first aid measures

- Inhalation** | Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.
- Skin** | In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention.
- Eye** | In case of contact with substance, immediately flush eyes with running water for at least 20 minutes.
- Ingestion** | Rinse mouth. Do not give anything by mouth to an unconscious person.

### Most important symptoms and effects, both acute and delayed

- | Refer to Section 11 - Toxicological Information.

### Indication of any immediate medical attention and special treatment needed

- Notes to Physician** | All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

## Section 5: Fire-Fighting Measures

### Extinguishing media

- Suitable Extinguishing Media** | This product does not burn or support combustion. Use extinguishing agent suitable for type of surrounding fire.

- Unsuitable Extinguishing Media** | None known.

### Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards** | None known.

- Hazardous Combustion Products** | None known.

### Advice for firefighters

- | Structural firefighters' protective clothing will only provide limited protection. Wear chemical protective clothing that is specifically recommended by the

manufacturer. It may provide little or no thermal protection.  
Wear positive pressure self-contained breathing apparatus (SCBA).

## Section 6 - Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

- Personal Precautions** | Ventilate enclosed areas. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Emergency Procedures** | As an immediate precautionary measure, isolate spill or leak area for at least 25 meters (75 feet) in all directions. Keep unauthorized personnel away. Stay upwind.

### Environmental precautions

- | No specific actions or treatments recommended related to exposure to this material.

### Methods and material for containment and cleaning up

- Containment/Clean-up Measures** | Avoid generating dust.  
Wet down material before clean-up. Use vacuums with high-efficiency particulate air (HEPA) filters or wet-sweeping for clean-up. Never dry sweep or blow dust with compressed air.

## Section 7 - Handling and Storage

### Precautions for safe handling

- Handling** | Use good safety and industrial hygiene practices. Use only in well ventilated areas. Wear appropriate personal protective equipment, avoid direct contact. Wear long sleeves and/or protective coveralls. Do not breathe dust. Avoid contact with skin, eyes, and clothing. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Contaminated clothing must be vacuumed before removal. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Wash thoroughly after handling.

### Conditions for safe storage, including any incompatibilities

- Storage** | Store in a covered location. Keep container closed. Keep from freezing. Storage and work area should be periodically cleaned to minimize dust accumulation.

## Section 8 - Exposure Controls/Personal Protection

### Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Canada Ontario	Canada Quebec	Mexico	NIOSH
Silica, crystalline - tridymite (15468-32-3)	TWAs	Not established	Not established	0.05 mg/m3 TWAEV (respirable dust)	0.05 mg/m3 TWA LMPE-PPT (respirable fraction)	0.05 mg/m3 TWA (respirable dust)
	STELs	Not established	Not established	Not established	10 mg/m3 STEL [LMPE-CT] (as Fe)	Not established
Iron oxide (1309-37-1)	TWAs	5 mg/m3 TWA (respirable fraction)	5 mg/m3 TWA (respirable)	5 mg/m3 TWAEV (dust and fume, as Fe); 10 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, regulated under Rouge, total dust)	5 mg/m3 TWA LMPE-PPT	5 mg/m3 TWA (dust and fume, as Fe)

Titanium dioxide (13463-67-7)	STELs	Not established	Not established	Not established	20 mg/m3 STEL [LMPE-CT] (as Ti)	Not established
	TWAs	10 mg/m3 TWA	10 mg/m3 TWA	10 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, total dust)	10 mg/m3 TWA LMPE-PPT (as Ti)	Not established
Silica, amorphous (7631-86-9)	TWAs	Not established	Not established	Not established	Not established	6 mg/m3 TWA
Cristobalite (14464-46-1)	TWAs	0.025 mg/m3 TWA (respirable fraction)	0.05 mg/m3 TWA (designated substances regulation, respirable, listed under Silica, crystalline)	0.05 mg/m3 TWAEV (respirable dust)	0.05 mg/m3 TWA LMPE-PPT (respirable fraction)	0.05 mg/m3 TWA (respirable dust)
Clay (Proprietary)	STELs	Not established	Not established	Not established	20 mg/m3 STEL [LMPE-CT]	Not established
	TWAs	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)	2 mg/m3 TWA (containing no Asbestos and <1% Crystalline silica, respirable)	5 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, respirable dust)	10 mg/m3 TWA LMPE-PPT	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
Quartz (14808-60-7)	TWAs	0.025 mg/m3 TWA (respirable fraction)	0.10 mg/m3 TWA (designated substances regulation, respirable, listed under Silica, crystalline)	0.1 mg/m3 TWAEV (respirable dust)	0.1 mg/m3 TWA LMPE-PPT (respirable fraction)	0.05 mg/m3 TWA (respirable dust)
Silicon carbide (409-21-2)	STELs	Not established	Not established	Not established	20 mg/m3 STEL [LMPE-CT]	Not established
	TWAs	10 mg/m3 TWA (nonfibrous, inhalable fraction, particulate matter containing no asbestos and <1% crystalline silica); 3 mg/m3 TWA (nonfibrous, respirable fraction, particulate matter containing no asbestos and <1% crystalline silica); 0.1 fiber/cm3 TWA (as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination., respirable fibers, including whiskers, length >5 µm, aspect ratio >=3:1)	10 mg/m3 TWA (non- fibrous, containing no Asbestos and <1% Crystalline silica, inhalable); 3 mg/m3 TWA (non-fibrous, containing no Asbestos and <1% Crystalline silica, respirable); 0.1 fibre/cm3 TWA (fibrous, including whiskers, fibres >5 µm in length and an aspect ratio >=3:1 as determined by the membrane filter method at 400-450 times magnification (4-mm objective), using phase-contrast illumination, respirable)	10 mg/m3 TWAEV (non fibrous, containing no Asbestos and <1% Crystalline silica, total dust)	10 mg/m3 TWA LMPE-PPT	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)
				2 mg/m3 TWAEV		

Graphite (7782-42-5)	TWAs	2 mg/m3 TWA (all forms except graphite fibers, respirable fraction)	2 mg/m3 TWA (except Graphite fibres, respirable)	(containing no Asbestos and <1% Crystalline silica, except Graphite fibres, respirable dust)	2 mg/m3 TWA LMPE-PPT (synthetic and natural)	2.5 mg/m3 TWA (natural, respirable dust)
Exposure Limits/Guidelines (Con't.)						
			Result	OSHA		
Iron oxide (1309-37-1)			TWAs	10 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust, listed under Rouge); 5 mg/m3 TWA (respirable fraction, listed under Rouge)		
Titanium dioxide (13463-67-7)			TWAs	15 mg/m3 TWA (total dust)		
Clay (Proprietary)			TWAs	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)		
Silicon carbide (409-21-2)			TWAs	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)		
Graphite as Particulates not otherwise classified (PNO)			TWAs	15 mg/m3 TWA (synthetic, total dust); 5 mg/m3 TWA (synthetic, respirable fraction)		

**Exposure Limits Supplemental OSHA**

- Cristobalite (14464-46-1): **Mineral Dusts:** ((1/2)(30)/( %SiO2 + 2) mg/m3 TWA, total dust; (1/2)(250)/( %SiO2 + 5) mppcf TWA, respirable fraction; (1/2)(10)/( %SiO2 + 2) mg/m3 TWA, respirable fraction)
- Quartz (14808-60-7): **Mineral Dusts:** ((30)/( %SiO2 + 2) mg/m3 TWA, total dust; (250)/( %SiO2 + 5) mppcf TWA, respirable fraction; (10)/( %SiO2 + 2) mg/m3 TWA, respirable fraction)
- Silica, crystalline - tridymite (15468-32-3): **Mineral Dusts:** ((1/2)(30)/( %SiO2 + 2) mg/m3 TWA, total dust; (1/2)(250)/( %SiO2 + 5) mppcf TWA, respirable fraction; (1/2)(10)/( %SiO2 + 2) mg/m3 TWA, respirable fraction)
- Silica, amorphous (7631-86-9): **Mineral Dusts:** (20 mppcf TWA; (80)/( % SiO2) mg/m3 TWA)
- Graphite (7782-42-5): **Mineral Dusts:** (15 mppcf TWA (natural))

**Exposure controls**

**Engineering Measures/Controls**

| Good general ventilation 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.

**Personal Protective Equipment**

**Respiratory**

| For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

**Eye/Face**

| Wear safety goggles.

**Skin/Body**

| Wear long sleeves and/or protective coveralls.

**General Industrial Hygiene Considerations**

| Handle in accordance with good industrial hygiene and safety practice. Do not get in eyes or on skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

**Environmental Exposure Controls** | Follow best practice for site management and disposal of waste. Dispose of in an approved landfill.

**Key to abbreviations**

ACGIH = American Conference of Governmental Industrial Hygiene

STEL = Short Term Exposure Limits are based on 15-minute exposures

NIOSH = National Institute of Occupational Safety and Health

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

OSHA = Occupational Safety and Health Administration

TWAEV = Time-Weighted Average Exposure Value

## Section 9 - Physical and Chemical Properties

### Information on Physical and Chemical Properties

<b>Material Description</b>			
Physical Form	Solid	Appearance/Description	Gray granular dry powder with an earthy odor.
Color	Gray	Odor	Earthy
Particulate Size	600 µ	Odor Threshold	No data available
<b>General Properties</b>			
Boiling Point	No data available	Melting Point	No data available
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	1.3 to 1.6 Water=1	Water Solubility	Negligible < 0.1 %
Viscosity	No data available		
<b>Volatility</b>			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available	VOC (Wt.)	0 %
VOC (Vol.)	0 %		
<b>Flammability</b>			
Flash Point	Not relevant	UEL	Not relevant
LEL	Not relevant	Autoignition	No data available
Flammability (solid, gas)	No data available		
<b>Environmental</b>			
Octanol/Water Partition coefficient	No data available		

## Section 10: Stability and Reactivity

**Reactivity**

| No dangerous reaction known under conditions of normal use.

**Chemical stability**

| Stable under normal temperatures and pressures.

**Possibility of hazardous reactions**

| Hazardous polymerization will not occur.

**Conditions to avoid**

| No data available.

**Incompatible materials**

| No data available

**Hazardous decomposition products**

| No data available

**Section 11 - Toxicological Information**

**Information on toxicological effects**

Components		
Aluminum sulfate (2:3) (0.57% TO 2.4%)	10043-01-3	<b>Irritation:</b> Eye-Rabbit • 10 mg 24 Hour(s) • Severe irritation; <b>Multi-dose Toxicity:</b> Ingestion/Oral-Rat TDLo • 10138 mg/kg 8 Day(s)-Continuous; <i>Kidney, Ureter, and Bladder</i> . <b>Other changes in urine composition; Nutritional and Gross Metabolic:Changes in Chemistry or Temperature:P</b>
Gilsonite (12% TO 16%)	12002-43-6	<b>Multi-dose Toxicity:</b> Inhalation-Human TCLo • 35.5 mg/m <sup>3</sup> 1 Year(s)-Intermittent; <i>Lungs, Thorax, or Respiration</i> . <b>Structural or functional change in trachea or bronchi; Lungs, Thorax, or Respiration:Cough</b>
Clay (7% TO 11.7%)	Proprietary	<b>Multi-dose Toxicity:</b> Inhalation-Rat TCLo • 30 mg/m <sup>3</sup> 96 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration</i> . <b>Fibrosis (interstitial); Lungs, Thorax, or Respiration:Other changes; Lungs, Thorax, or Respiration:Tumors;</b> <b>Reproductive:</b> Ingestion/Oral-Rat TDLo • 370 g/kg (37D pre/1-22D preg); <i>Reproductive Effects:Maternal Effects:Other effects; Reproductive Effects:Effects on Newborn:Other neonatal measures or effects.</i>
Titanium dioxide (0.0975% TO 0.195%)	13463-67-7	<b>Irritation:</b> Skin-Human • 300 µg 3 Day(s)-Intermittent • Mild irritation; <b>Tumorigen / Carcinogen:</b> Inhalation-Rat TCLo • 250 mg/m <sup>3</sup> 6 Hour(s) 2 Year(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors</i>
Silicon carbide (9.49% TO 16%)	409-21-2	<b>Tumorigen / Carcinogen:</b> Implant-Rat TDLo • 200 mg/kg; <i>Tumorigenic:Neoplastic by RTECS criteria; Tumorigenic:Tumors at site of application</i>
Silica, amorphous (2.725% TO 6.49%)	7631-86-9	<b>Irritation:</b> Eye-Rabbit • 25 mg 24 Hour(s) • Mild irritation

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • No data available
Aspiration Hazard	OSHA HCS 2012 • No data available
Carcinogenicity	OSHA HCS 2012 • Carcinogenicity 1A
Germ Cell Mutagenicity	OSHA HCS 2012 • No data available
Skin corrosion/Irritation	OSHA HCS 2012 • No data available
Skin sensitization	OSHA HCS 2012 • Skin Sensitizer 1
STOT-RE	OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1
STOT-SE	OSHA HCS 2012 • No data available
Toxicity for Reproduction	OSHA HCS 2012 • No data available
Respiratory sensitization	OSHA HCS 2012 • No data available
Serious eye damage/Irritation	OSHA HCS 2012 • No data available

**Route(s) of entry/exposure**

| Inhalation, Skin, Eye, and Ingestion

**Medical Conditions Aggravated by Exposure**

| Any pre-existing conditions of the lungs. Inhalation of dust containing crystalline silica pulmonary diseases such as asthma and lung disorder associated with smoking.

**Potential Health Effects**

**Inhalation**

**Acute (Immediate)**

| Nuisance dust may affect the lungs but reactions are typically reversible.

**Chronic (Delayed)**

| Chronic overexposure to dust containing respirable sized crystalline silica can cause delayed lung injury (silicosis).

**Skin**



**Acute (Immediate)** | May cause skin sensitization. Symptoms include redness, and skin rash. Exposure to dust may cause mechanical irritation.

**Chronic (Delayed)** | No data available.

**Eye**

**Acute (Immediate)** | Exposure to dust may cause mechanical irritation. Excessive concentrations of nuisance dust in the workplace may reduce visibility and may cause unpleasant deposits in eyes.

**Chronic (Delayed)** | No data available.

**Ingestion**

**Acute (Immediate)** | Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

**Chronic (Delayed)** | No data available.

**Carcinogenic Effects**

| May cause cancer. IARC studies have shown sufficient evidence from animal studies to categorize crystalline silica as a group 1 carcinogen.

<b>Carcinogenic Effects</b>			
	<b>CAS</b>	<b>IARC</b>	<b>NTP</b>
Silica, crystalline - tridymite	15468-32-3	Group 1-Carcinogenic	Not Listed
Titanium dioxide	13463-67-7	Group 2B-Possible Carcinogen	Not Listed
Cristobalite	14464-46-1	Group 1-Carcinogenic	Not Listed
Quartz	14808-60-7	Group 1-Carcinogenic	Known Human Carcinogen

**Key to abbreviations**

TC = Toxic Concentration

TD = Toxic Dose

**Section 12 - Ecological Information**

**Toxicity**

| Material data lacking.

**Persistence and degradability**

| Material data lacking.

**Bioaccumulative potential**

| Material data lacking.

**Mobility in Soil**

| Material data lacking.

**Other adverse effects**

| No studies have been found.

**Section 13 - Disposal Considerations**

**Waste treatment methods**

**Product waste** | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Packaging waste** | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

**Special precautions for user** | None specified.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** | No data available

## Section 15 - Regulatory Information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**SARA Hazard Classifications** | Acute, Chronic

State Right To Know				
Component	CAS	MA	NJ	PA
Aluminum sulfate (2:3)	10043-01-3	Yes	Yes	Yes
Bauxite	1318-16-7	No	No	No
Bentonite	1302-78-9	No	No	No
Cristobalite	14464-46-1	Yes	Yes	Yes
Graphite	7782-42-5	Yes	Yes	Yes
Clay	<i>Proprietary</i>	Yes	Yes	Yes
Quartz	14808-60-7	Yes	Yes	Yes
Silica, amorphous	7631-86-9	Yes	Yes	Yes
Silica, crystalline - tridymite	15468-32-3	Yes	Yes	Yes
Titanium dioxide	13463-67-7	Yes	Yes	Yes

Inventory			
Component	CAS	Canada DSL	TSCA
Aluminum sulfate (2:3)	10043-01-3	Yes	Yes
Bauxite	1318-16-7	No	No
Bentonite	1302-78-9	Yes	Yes
Cristobalite	14464-46-1	Yes	Yes
Graphite	7782-42-5	Yes	Yes
Clay	<i>Proprietary</i>	Yes	Yes
Quartz	14808-60-7	Yes	Yes
Silica, amorphous	7631-86-9	Yes	Yes
Silica, crystalline - tridymite	15468-32-3	No	No

Titanium dioxide	13463-67-7	Yes	Yes
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**Canada**

**Labor**

**Canada - WHMIS - Classifications of Substances**

• Aluminum sulfate (2:3)	10043-01-3	D2B
• Silica, crystalline - tridymite	15468-32-3	D2A
• Clay	<i>Proprietary</i>	D2A
• Bauxite	1318-16-7	Not Listed
		D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Titanium dioxide, mixture containing on Health Canada's WHMIS Division website.)
• Titanium dioxide	13463-67-7	D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Titanium dioxide, mixture containing on Health Canada's WHMIS Division website.)
		D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS Division website.)
• Cristobalite	14464-46-1	Uncontrolled product according to WHMIS classification criteria
		D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Silica, crystalline, encapsulated on Health Canada's WHMIS Division website.)
• Silica, amorphous	7631-86-9	D2A (natural); D2B (synthetic)
		D2A
• Quartz	14808-60-7	Not Listed
		1 %
• Graphite	7782-42-5	Not Listed
• Bentonite	1302-78-9	Not Listed

**Canada - WHMIS - Ingredient Disclosure List**

• Aluminum sulfate (2:3)	10043-01-3	Not Listed
• Silica, crystalline - tridymite	15468-32-3	1 %
• Clay	<i>Proprietary</i>	Not Listed
• Bauxite	1318-16-7	1 %
• Titanium dioxide	13463-67-7	Not Listed
• Cristobalite	14464-46-1	1 %
• Silica, amorphous	7631-86-9	1 %
• Quartz	14808-60-7	1 %
• Graphite	7782-42-5	Not Listed
• Bentonite	1302-78-9	Not Listed

**Environment**

**Canada - CEPA - Priority Substances List**

• Aluminum sulfate (2:3)	10043-01-3	Priority Substance List 2 (substance not considered toxic)
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• Silica, crystalline - tridymite	15468-32-3	Not Listed
• Clay	<i>Proprietary</i>	Not Listed
• Bauxite	1318-16-7	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Cristobalite	14464-46-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Bentonite	1302-78-9	Not Listed

## United States

### Environment

#### U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Aluminum sulfate (2:3)	10043-01-3	5000 lb final RQ; 2270 kg final RQ
• Silica, crystalline - tridymite	15468-32-3	Not Listed
• Clay	<i>Proprietary</i>	Not Listed
• Bauxite	1318-16-7	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Cristobalite	14464-46-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Bentonite	1302-78-9	Not Listed

## United States - California

### Environment

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

• Aluminum sulfate (2:3)	10043-01-3	Not Listed
• Silica, crystalline - tridymite	15468-32-3	Not Listed
• Clay	<i>Proprietary</i>	Not Listed
• Bauxite	1318-16-7	Not Listed
• Titanium dioxide	13463-67-7	carcinogen, initial date 9/2/11 (airborne, unbound particles of respirable size)
• Cristobalite	14464-46-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Quartz	14808-60-7	carcinogen, initial date 10/1/88 (airborne particles of respirable size)
• Graphite	7782-42-5	Not Listed
• Bentonite	1302-78-9	Not Listed

## United States - Pennsylvania

### Labor

#### U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

• Aluminum sulfate (2:3)	10043-01-3	
• Silica, crystalline - tridymite	15468-32-3	Not Listed
• Clay	<i>Proprietary</i>	Not Listed
• Bauxite	1318-16-7	Not Listed
• Titanium dioxide	13463-67-7	Not Listed
• Cristobalite	14464-46-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed

• Quartz	14808-60-7	Not Listed
• Graphite	7782-42-5	Not Listed
• Bentonite	1302-78-9	Not Listed

## Other Information

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

### Section 16 - Other Information

**Last Revision Date** | 29/December/2014

**Preparation Date** | 01/June/2009

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#### Key to abbreviations

NDA = No data available