

## Safety Data Sheet



### Section 1: Identification

#### Product identifier

- Product Name** • **Reno Plastic 60 SIC**  
**Product Code** • 247100

#### 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.  
P O 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 Irritation 2  
Serious Eye Damage 1  
Carcinogenicity 1A  
Specific Target Organ Toxicity Repeated Exposure 2

#### Label elements

**OSHA HCS 2012**

#### DANGER



- Hazard statements** • Causes skin irritation  
Causes serious eye damage  
May cause cancer.  
May cause damage to organs through prolonged or repeated exposure.

#### Precautionary statements

- Prevention** • Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust.  
Wash thoroughly after handling.  
Wear protective gloves, clothing, and eye/face protection, .

- Response** • If on skin: Wash with plenty of water .  
Take off contaminated clothing and wash before reuse.  
Specific treatment, see supplemental first aid information.  
If skin irritation occurs: Get medical advice/attention.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.  
IF exposed or concerned: Get medical advice/attention.

- Storage/Disposal** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## 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  
Corrosive - E

## Label elements

### WHMIS



- WHMIS
- Other Toxic Effects - D2A  
Corrosive - E

## 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
Silicon carbide	CAS:409-21-2	46.18% TO 49%	NDA	OSHA HCS 2012: STOT RE 2 (Lungs)
Aluminum oxide	CAS:1344-28-1	8.865% TO 13%	Inhalation-Rat LC50 • 0.2 mg/L 5 Hour(s) 28 Week(s)	OSHA HCS 2012: Not Classified

Mullite	CAS:1302-93-8	7.15% TO 9.75%	NDA	OSHA HCS 2012: WHMIS: Other Toxic Effects - D2B
Water	CAS:7732-18-5	5% TO 9%	NDA	OSHA HCS 2012: WHMIS:
Bentonite	CAS:1302-78-9	5% TO 8%	NDA	OSHA HCS 2012: STOT RE 2 (Lungs)
Phosphoric acid	CAS:7664-38-2	3% TO 4.55%	Ingestion/Oral-Rat LD50 • 1.25 g/kg Inhalation-Rat LC50 • 25.5 mg/m <sup>3</sup>	OSHA HCS 2012: Skin Corr. 1C; Eye Dam. 1
Silica, crystalline – cristobalite	CAS:14464-46-1	1.65% TO 3.75%	NDA	OSHA HCS 2012: STOT RE 1; Carc. 1A WHMIS: Other Toxic Effects - D2A
Silica, amorphous	CAS:7631-86-9	1.1% TO 3%	NDA	OSHA HCS 2012: Not Classified
Phosphoric acid, aluminum salt (1:3)	CAS:13530-50-2	0.5% TO 1.05%	NDA	OSHA HCS 2012: Not Classified
Boron oxide	CAS:1303-86-2	0.04% TO 0.35%	Ingestion/Oral-Rat LD50 • 3150 mg/kg	OSHA HCS 2012: Not Classified
Quartz	CAS:14808-60-7	< 0.33%	NDA	OSHA HCS 2012: Carc. 1A; STOT RE 1 (Lungs)
1-Propene, homopolymer	CAS:9003-07-0	< 0.18%	Ingestion/Oral-Rat LD50 • >8 g/kg	OSHA HCS 2012: Not Classified
Urea, 1,3-diethyl-2-thio-	CAS:105-55-5	< 0.006%	Ingestion/Oral-Rat LD50 • 316 mg/kg	OSHA HCS 2012: WHMIS:

## Section 4: First-Aid Measures

### Description of first aid measures

#### Inhalation

- Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Get medical attention immediately.

#### Skin

- In case of contact with substance, immediately flush skin with running water for at least 20 minutes. If skin irritation occurs: Get medical advice/attention.

#### Eye

- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

#### Ingestion

- Rinse mouth. Do not give anything by mouth to an unconscious person. Get medical attention immediately.

### 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** • Material is non-combustible. In case of fire use media as appropriate for 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**

- Wear positive pressure self-contained breathing apparatus (SCBA). 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.

**Section 6 - Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions**

- Isolate hazard area and deny entry to unauthorized and/or unprotected personnel. Do not touch or walk through spilled material. Ensure adequate ventilation to remove vapors, fumes, dust etc.

**Emergency Procedures**

- Ventilate closed spaces before entering. Isolate hazard area and deny entry to unauthorized and/or unprotected personnel.

**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.  
 FOR SMALL SPILLS: Clean with a vacuum with a filtration system sufficient to remove and prevent recirculation of crystalline silica (a vacuum equipped with a high-efficiency particulate air (HEPA) filter is recommended).  
 FOR LARGE SPILLS: Use a fine spray or mist to control dust creation and carefully scoop or shovel into clean dry container for later reuse or disposal.  
 If, an appropriate vacuum is unavailable, only wet-clean-up methods should be used (i.e. misting). Moisture should be added as necessary to reduce exposure to airborne respirable silica dust.

**Section 7 - Handling and Storage**

**Precautions for safe handling**

**Handling**

- Do not breathe dust. Avoid contact with skin, eyes, and clothing. Minimize dust generation and accumulation. Use good safety and industrial hygiene practices. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Wear long sleeves and/or protective coveralls. 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. Do not use in areas without adequate ventilation.

**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
Boron oxide (1303-86-2)	STELs	Not established	Not established	Not established	20 mg/m3 STEL [PPT-CT]	Not established
	TWAs	10 mg/m3 TWA	10 mg/m3 TWA	10 mg/m3 TWA EV	10 mg/m3 TWA VLE-PPT	10 mg/m3 TWA

Quartz (14808-60-7)	TWAs	0.025 mg/m3 TWA (respirable particulate matter)	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 VLE-PPT (respirable fraction)	0.05 mg/m3 TWA (respirable dust)
Silica, amorphous (7631-86-9)	TWAs	Not established	Not established	Not established	Not established	6 mg/m3 TWA
Silica, crystalline – cristobalite (14464-46-1)	TWAs	0.025 mg/m3 TWA (respirable particulate matter)	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 VLE-PPT (respirable fraction)	0.05 mg/m3 TWA (respirable dust)
Phosphoric acid (7664-38-2)	STELs	3 mg/m3 STEL	3 mg/m3 STEL	3 mg/m3 STEV	3 mg/m3 STEL [PPT-CT]	3 mg/m3 STEL
	TWAs	1 mg/m3 TWA	1 mg/m3 TWA	1 mg/m3 TWAEV	1 mg/m3 TWA VLE-PPT	1 mg/m3 TWA
Aluminum oxide (1344-28-1)	TWAs	Not established	Not established	10 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, total dust, as Al)	10 mg/m3 TWA VLE-PPT	Not established
Silicon carbide (409-21-2)	STELs	Not established	Not established	Not established	20 mg/m3 STEL [PPT-CT]	Not established
	TWAs	10 mg/m3 TWA (nonfibrous, inhalable particulate matter, particulate matter containing no asbestos and <1% crystalline silica); 3 mg/m3 TWA (nonfibrous, respirable particulate matter, 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 VLE-PPT	10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)

**Exposure Limits/Guidelines (Con't.)**

	Result	OSHA
Boron oxide (1303-86-2)	TWAs	15 mg/m3 TWA (total dust)
Quartz (14808-60-7)	TWAs	50 µg/m3 TWA (listed under Respirable crystalline silica)

Silica, crystalline – cristobalite (14464-46-1)	TWAs	50 µg/m3 TWA (listed under Respirable crystalline silica)
Phosphoric acid (7664-38-2)	TWAs	1 mg/m3 TWA
Aluminum oxide (1344-28-1)	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)

## Exposure Control Notations

### Canada Ontario

- Quartz (14808-60-7): **Designated Substances:** (0.10 mg/m3 TWA (respirable fraction, listed under Silica, crystalline))
- Silica, crystalline – cristobalite (14464-46-1): **Designated Substances:** (0.05 mg/m3 TWA (respirable fraction, listed under Silica, crystalline))

### Canada Quebec

- Quartz (14808-60-7): **Carcinogens:** (C2 carcinogen - effect suspected in humans)

### ACGIH

- Silicon carbide (409-21-2): **Carcinogens:** (A2 - Suspected Human Carcinogen (fibrous, including whiskers))
- Quartz (14808-60-7): **Carcinogens:** (A2 - Suspected Human Carcinogen)
- Silica, crystalline – cristobalite (14464-46-1): **Carcinogens:** (A2 - Suspected Human Carcinogen)

## Exposure Limits Supplemental

### OSHA

- Quartz (14808-60-7): **Mineral Dusts:** ((250)/( %SiO<sub>2</sub> + 5) mppcf TWA, respirable fraction; (10)/( %SiO<sub>2</sub> + 2) mg/m3 TWA, respirable fraction)
- Silica, amorphous (7631-86-9): **Mineral Dusts:** (20 mppcf TWA; (80)/( % SiO<sub>2</sub>) mg/m3 TWA)
- Silica, crystalline – cristobalite (14464-46-1): **Mineral Dusts:** ((1/2)(250)/( %SiO<sub>2</sub> + 5) mppcf TWA, respirable fraction; (1/2)(10)/( %SiO<sub>2</sub> + 2) mg/m3 TWA, respirable fraction)

### ACGIH

- Silicon carbide (409-21-2): **TLV Basis - Critical Effects:** (upper respiratory tract irritation (nonfibrous); cancer (fibrous, including whiskers); mesothelioma (fibrous, including whiskers))
- Quartz (14808-60-7): **TLV Basis - Critical Effects:** (lung cancer; pulmonary fibrosis)
- Phosphoric acid (7664-38-2): **TLV Basis - Critical Effects:** (eye, skin and upper respiratory tract irritation)
- Boron oxide (1303-86-2): **TLV Basis - Critical Effects:** (eye and upper respiratory tract irritation)
- Silica, crystalline – cristobalite (14464-46-1): **TLV Basis - Critical Effects:** (lung cancer; pulmonary fibrosis)

## 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. Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values. Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is not leakage from the equipment). Collection systems must be designed and maintained to prevent the accumulation and recirculation of respirable silica into the workplace.

### 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 protective eyewear (goggles, face shield, or safety glasses).

#### Hands

- Wear appropriate gloves.

#### Skin/Body

- Wear long sleeves and/or protective coveralls.

**General Industrial Hygiene Considerations**

- Avoid breathing dust. Avoid contact with skin, eyes or clothing. Do not remove dusts from clothing by blowing or shaking. Do not eat, drink or smoke during work. Wash hands before eating, drinking, or smoking. Wash thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice.

**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

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

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

STEV = Short Term Exposure Value

TWAEV = Time-Weighted Average Exposure Value

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

**Section 9 - Physical and Chemical Properties****Information on Physical and Chemical Properties**

<b>Material Description</b>			
Physical Form	Solid	Appearance/Description	Dark gray putty like material with no odor.
Color	Dark gray.	Odor	Odorless
Particulate Size	600 µ	Odor Threshold	No data available
<b>General Properties</b>			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	2.6 to 2.8 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	No data available	UEL	No data available
LEL	No data available	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 not indicated.

**Conditions to avoid**

- None known.

## Incompatible materials

- None known.

## Hazardous decomposition products

- None known.

## Section 11 - Toxicological Information

### Information on toxicological effects

Components		
1-Propene, homopolymer (< 0.18%)	9003-07-0	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • >8 g/kg
Phosphoric acid (3% TO 4.55%)	7664-38-2	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 1.25 g/kg; <i>Lungs, Thorax, or Respiration:</i> <b>Acute pulmonary edema; Liver:Changes in liver weight;</b> Inhalation-Rat LC50 • 25.5 mg/m <sup>3</sup> ; <i>Lungs, Thorax, or Respiration:</i> <b>Acute pulmonary edema; Liver:Changes in liver weight</b>
Boron oxide (0.04% TO 0.35%)	1303-86-2	<b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 3150 mg/kg; <b>Irritation:</b> Eye-Rabbit • 50 mg; Skin-Rabbit • 1 g; <b>Multi-dose Toxicity:</b> Inhalation-Rat TClO • 150 mg/m <sup>3</sup> 2 Hour(s) 15 Day(s)-Intermittent; <i>Sense Organs and Special Senses:</i> <b>Olfaction:Other changes; Lungs, Thorax, or Respiration:Other changes; Nutritional and Gross Metabolic:</b> <i>Gross Metabolite Changes:</i> <b>Weight loss or decreased weight gain</b>
Silica, amorphous (1.1% TO 3%)	7631-86-9	<b>Irritation:</b> Eye-Rabbit • 25 mg 24 Hour(s) • Mild irritation
Silica, crystalline – cristobalite (1.65% TO 3.75%)	14464-46-1	<b>Acute Toxicity:</b> Inhalation-Human TClO • 16 mppcf 8 Hour(s) 17.9 Year(s)-Intermittent; <i>Lungs, Thorax, or Respiration:</i> <b>Fibrosis, focal (pneumoconiosis); Lungs, Thorax, or Respiration:Cough; Lungs, Thorax, or Respiration:Dyspnea;</b> <b>Multi-dose Toxicity:</b> Inhalation-Mouse TClO • 70 mg/m <sup>3</sup> 5 Hour(s) 12 Day(s)-Intermittent; <i>Lungs, Thorax, or Respiration:</i> <b>Fibrosis (interstitial); Lungs, Thorax, or Respiration:Other changes</b>

GHS Properties	Classification
Acute toxicity	OSHA HCS 2012 • Data lacking
Skin corrosion/Irritation	OSHA HCS 2012 • Skin Irritation 2
Serious eye damage/Irritation	OSHA HCS 2012 • Serious Eye Damage 1
Skin sensitization	OSHA HCS 2012 • Data lacking
Respiratory sensitization	OSHA HCS 2012 • Data lacking
Aspiration Hazard	OSHA HCS 2012 • Data lacking
Carcinogenicity	OSHA HCS 2012 • Carcinogenicity 1A
Germ Cell Mutagenicity	OSHA HCS 2012 • Data lacking
Toxicity for Reproduction	OSHA HCS 2012 • Data lacking
STOT-SE	OSHA HCS 2012 • Data lacking
STOT-RE	OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 2

### Target Organs

- [[206]]

### Route(s) of entry/exposure

- Inhalation, Skin, Eye, Ingestion

### Medical Conditions

- Any pre-existing conditions of the lungs. Disorders of the lungs.

### Aggravated by Exposure

### Potential Health Effects



**Inhalation**

**Acute (Immediate)**

- Exposure to dust may cause irritation.

**Chronic (Delayed)**

- Chronic overexposure to dust containing respirable sized crystalline silica can cause delayed lung injury (silicosis). Inhalation of dust containing crystalline silica pulmonary diseases such as asthma and lung disorder associated with smoking.

**Skin**

**Acute (Immediate)**

- Causes skin irritation. Exposure to dust may cause irritation.

**Chronic (Delayed)**

- No data available.

**Eye**

**Acute (Immediate)**

- Causes serious eye damage. 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>
Quartz	14808-60-7	Group 1-Carcinogenic	Known Human Carcinogen

**Key to abbreviations**

LD = Lethal Dose

TC = Toxic Concentration

**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
1-Propene, homopolymer	9003-07-0	No	No	No
Aluminum oxide	1344-28-1	Yes	Yes	Yes
Bentonite	1302-78-9	No	No	No
Boron oxide	1303-86-2	Yes	Yes	Yes
Mullite	1302-93-8	No	No	No
Phosphoric acid	7664-38-2	Yes	Yes	Yes
Phosphoric acid, aluminum salt (1:3)	13530-50-2	No	No	No
Quartz	14808-60-7	Yes	Yes	Yes
Silica, amorphous	7631-86-9	Yes	No	Yes
Silica, crystalline – cristobalite	14464-46-1	Yes	Yes	Yes
Silicon carbide	409-21-2	Yes	Yes	Yes
Urea, 1,3-diethyl-2-thio-	105-55-5	Yes	No	No
Water	7732-18-5	No	No	No

Inventory			
Component	CAS	Canada DSL	TSCA
1-Propene, homopolymer	9003-07-0	Yes	Yes
Aluminum oxide	1344-28-1	Yes	Yes
Bentonite	1302-78-9	Yes	Yes
Boron oxide	1303-86-2	Yes	Yes
Mullite	1302-93-8	Yes	Yes
Phosphoric acid	7664-38-2	Yes	Yes

Phosphoric acid, aluminum salt (1:3)	13530-50-2	Yes	Yes
Quartz	14808-60-7	Yes	Yes
Silica, amorphous	7631-86-9	Yes	Yes
Silica, crystalline – cristobalite	14464-46-1	Yes	Yes
Silicon carbide	409-21-2	Yes	Yes
Urea, 1,3-diethyl-2-thio-	105-55-5	Yes	Yes
Water	7732-18-5	Yes	Yes

**Canada**

**Labor**

**Canada - WHMIS 1988 - Classifications of Substances**

• Phosphoric acid, aluminum salt (1:3)	13530-50-2	Not Listed
• Urea, 1,3-diethyl-2-thio-	105-55-5	Not Listed
• Mullite	1302-93-8	Not Listed
• Boron oxide	1303-86-2	Not Listed
• Phosphoric acid	7664-38-2	E (including 5-35% in aqueous solution, 35%, aqueous solution 35-80%, 85% or less)
• Aluminum oxide	1344-28-1	Uncontrolled product according to WHMIS classification criteria
• Silicon carbide	409-21-2	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, crystalline – 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	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.)
• Quartz	14808-60-7	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.)
• 1-Propene, homopolymer	9003-07-0	Uncontrolled product according to WHMIS classification criteria
• Bentonite	1302-78-9	D2A
• Water	7732-18-5	Uncontrolled product according to WHMIS classification criteria

**Canada - WHMIS 1988 - Ingredient Disclosure List**

• Phosphoric acid, aluminum salt (1:3)	13530-50-2	Not Listed
• Urea, 1,3-diethyl-2-thio-	105-55-5	Not Listed
• Mullite	1302-93-8	Not Listed
• Boron oxide	1303-86-2	1 %
• Phosphoric acid	7664-38-2	1 %
• Aluminum oxide	1344-28-1	1 %
• Silicon carbide	409-21-2	Not Listed
• Silica, crystalline – cristobalite	14464-46-1	1 %
• Silica, amorphous	7631-86-9	1 %
• Quartz	14808-60-7	1 %
• 1-Propene, homopolymer	9003-07-0	Not Listed
• Bentonite	1302-78-9	Not Listed
• Water	7732-18-5	Not Listed

**United States**

**Environment**

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

• Phosphoric acid, aluminum salt (1:3)	13530-50-2	Not Listed
• Urea, 1,3-diethyl-2-thio-	105-55-5	Not Listed
• Mullite	1302-93-8	Not Listed
• Boron oxide	1303-86-2	Not Listed
• Phosphoric acid	7664-38-2	5000 lb final RQ; 2270 kg final RQ
• Aluminum oxide	1344-28-1	Not Listed
• Silicon carbide	409-21-2	Not Listed
• Silica, crystalline – cristobalite	14464-46-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Quartz	14808-60-7	Not Listed
• 1-Propene, homopolymer	9003-07-0	Not Listed
• Bentonite	1302-78-9	Not Listed
• Water	7732-18-5	Not Listed

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

• Phosphoric acid, aluminum salt (1:3)	13530-50-2	Not Listed
• Urea, 1,3-diethyl-2-thio-	105-55-5	Not Listed
• Mullite	1302-93-8	Not Listed
• Boron oxide	1303-86-2	Not Listed
• Phosphoric acid	7664-38-2	Not Listed
• Aluminum oxide	1344-28-1	1.0 % de minimis concentration (fibrous forms)
• Silicon carbide	409-21-2	Not Listed
• Silica, crystalline – cristobalite	14464-46-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Quartz	14808-60-7	Not Listed
• 1-Propene, homopolymer	9003-07-0	Not Listed
• Bentonite	1302-78-9	Not Listed
• Water	7732-18-5	Not Listed

**United States - Pennsylvania**

**Labor**

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

• Phosphoric acid, aluminum salt (1:3)	13530-50-2	Not Listed
• Urea, 1,3-diethyl-2-thio-	105-55-5	Not Listed

• Mullite	1302-93-8	Not Listed
• Boron oxide	1303-86-2	Not Listed
• Phosphoric acid	7664-38-2	
• Aluminum oxide	1344-28-1	
• Silicon carbide	409-21-2	Not Listed
• Silica, crystalline – cristobalite	14464-46-1	Not Listed
• Silica, amorphous	7631-86-9	Not Listed
• Quartz	14808-60-7	Not Listed
• 1-Propene, homopolymer	9003-07-0	Not Listed
• Bentonite	1302-78-9	Not Listed
• Water	7732-18-5	Not Listed

## Other Information

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

### Section 16 - Other Information

<b>Revision Date</b>	<ul style="list-style-type: none"> <li>• 14/March/2018</li> </ul>
<b>Last Revision Date</b>	<ul style="list-style-type: none"> <li>• 26/August/2017</li> </ul>
<b>Preparation Date</b>	<ul style="list-style-type: none"> <li>• 26/August/2017</li> </ul>
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#### Key to abbreviations

NDA = No data available