


SAFETY DATA SHEET

## Section 1: IDENTIFICATION

<b>Product Name:</b>	PREMIUM GEL®
<b>Other Means of Identification:</b>	None
<b>Recommended Use:</b>	Not available
<b>Recommended Restrictions:</b>	Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.
<b>Supplier:</b>	Bri-Chem Supply Ltd. 27075 Acheson Road Acheson, AB T7X 6B1
<b>Phone Number:</b>	780-962-9490
<b>24 Hour Emergency:</b>	1-866-519-4752 (US, Canada, Mexico) 1-760-476-3962

## Section 2: HAZARD(S) IDENTIFICATION

Physical Hazards:	Not classified	
Health Hazards	Carcinogenicity	Category 1A
	Specific target organ toxicity, repeated exposure	Category 1
Environmental Hazards:	Not classified	
OSHA Defined Hazards:	Not classified	
Label Elements:		
Signal Word:	Danger	
Hazard Statement:	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 breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.	

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<b>Response:</b>	If exposed or concerned: Get medical advice/attention.
<b>Storage:</b>	Store in accordance with local/regional/national regulations
<b>Disposal:</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not Otherwise Classified (HNOC):</b>	None known
<b>Supplemental Informational:</b>	6.96% of the mixture consists of component(s) of unknown acute oral toxicity. 99.85% of the mixture consists of component(s) of unknown acute dermal toxicity. 99.85% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

**Section 3: COMPOSITION / INFORMATION ON INGREDIENTS****Mixtures**

<b>Chemical Name</b>	<b>Common Name and Synonyms</b>	<b>CAS Number</b>	<b>%</b>
Bentonite		1302-78-9	99.85
Other components below reportable levels			0.15

**Constituents**

<b>Chemical Name</b>	<b>Common Name and Synonyms</b>	<b>CAS Number</b>	<b>%</b>
Quartz (SiO <sub>2</sub> )		14808-60-7	<= 6
Cristobalite		14464-46-1	<= 2

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret

**Composition Comments:** Occupational Exposure Limits for constituents are listed in Section 8

**Section 4: FIRST-AID MEASURES****First-Aid Measures**

<b>Inhalation:</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin Contact:</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye Contact:</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion:</b>	Rinse mouth. Get medical attention if symptoms occur.

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**Most Important Symptoms/Effects, Acute and Delayed**

**Indication or Immediate Medical Attention and Special Treatment Needed:** Provide general supportive measures and treat symptomatically. Keep victim under observation. 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.

**Section 5: FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** Water fog. Foam. Dry chemical power. Carbon dioxide (CO<sub>2</sub>)

**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:** Move containers from fire area if you can do so without risk

**Specific Methods:** Use standard firefighting procedures and consider the hazard

**General Fire Hazards:** No unusual fire or explosion hazards noted

**Section 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. 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. Following product recovery, flush area with water. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

**Environmental Precautions:** No special environmental precautions required. Prevent discharge of larger quantity to drain.

## Section 7: HANDLING AND STORAGE

### Precautions for Safe Handling:

Do not handle until all safety precautions have been read and understood. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. Do not breathe dust. Avoid prolonged exposure. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

### Conditions for Safe Storage, Including any Incompatibilities:

Store in tightly closed container. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

## Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### Occupational Exposure Limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

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

Constituents	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	PEL	0.05 mg/m3	Respirable dust
QUARTZ (SIO2) (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust

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

Constituents	Type	Value	Form
INERT OR NUISANCE DUSTS (CAS SEQ250)	TWA	5 mg/m3	Respirable fraction
		15 mg/m3	Total dust
		50 mppcf	Total dust
		15 mppcf	Respirable fraction
CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable
		1.2 mppcf	Respirable
QUARTZ (SIO2) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable
		2.4 mppcf	Respirable

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**US. ACGIH Threshold Limit Values Constituents**

Constituents	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.025 mg/m3	Respirable fraction
QUARTZ (SIO2) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction

**US. NIOSH: Pocket Guide to Chemical Hazards**

Constituents	Type	Value	Form
CRISTOBALITE (CAS 14464-46-1)	TWA	0.05 mg/m3	Respirable dust
QUARTZ (SIO2) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust

<b>Biological Limit Values:</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure Guidelines:</b>	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.
<b>Appropriate Engineering Controls:</b>	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.

**Individual Protection Measures, Such as Personal Protective Equipment**

<b>Eye/Face Protection:</b>	Applicable for industrial settings only. Wear safety glasses with side shields (or goggles).
<b>Skin Protection</b>	
<b>Hand Protection:</b>	Applicable for industrial settings only. Wear appropriate chemical resistant gloves.
<b>Other:</b>	Applicable for industrial settings only. Use an impervious apron is recommended.
<b>Respiratory Protection:</b>	Applicable for industrial settings only. Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.
<b>Thermal Hazards:</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General Hygiene Considerations:</b>	Observe any medical surveillance requirements. 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.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Physical State:	Solid
Form:	Solid
Color:	Not available
Odor:	Not available
Odor Threshold:	Not applicable
pH:	8.5 - 11
Melting Point/Freezing Point:	>842 °F (> 450°C) / Not applicable
Initial Boiling Point and Boiling Range:	Not applicable
Flash Point:	Not applicable
Evaporation Rate:	Not available
Flammability (solid, gas):	Non available
Upper/Lower Flammability or Explosive Limits	
Flammability Limit – Lower (%):	Not applicable
Flammability Limit – Upper (%):	Not applicable
Explosive Limit – Lower (%):	Not available
Explosive Limit – Upper (%):	Not available
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Relative Density:	2.6 g/cm <sup>3</sup>
Solubility(ies)	
Solubility (Water)	< 0.9 mg/l
Partition coefficient (n-octanol/water)	Not applicable
Auto-ignition Temperature	Not applicable
Decomposition Temperature:	> 932 °F (> 500 °C)
Viscosity:	Not applicable
Viscosity Temperature:	Not applicable
Other Information:	

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<b>Bulk Density:</b>	0.9 – 1.4 g/cm <sup>3</sup>
<b>Explosive Limit:</b>	Not applicable
<b>Explosive Properties:</b>	Not explosive
<b>Explosivity:</b>	Not applicable
<b>Flame Extension:</b>	Not applicable
<b>Flammability:</b>	Not applicable
<b>Flammability (Flash Back):</b>	Not applicable
<b>Flammability (Heat of Combustion):</b>	Not applicable
<b>Flammability (Train Fire):</b>	Not applicable
<b>Flammability Class:</b>	Not applicable
<b>Flash Point Class:</b>	Not flammable
<b>Molecular Formula:</b>	UVCB Substance
<b>Molecular Weight:</b>	Not applicable
<b>Oxidizing Properties:</b>	Not oxidizing
<b>Percent Volatile:</b>	0%
<b>pH in Aqueous Solution:</b>	8.5 - 11
<b>Specific Gravity:</b>	Not applicable
<b>VOC:</b>	CARB 0%

**Section 10: STABILITY AND REACTIVITY**

<b>Reactivity:</b>	This product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical Stability:</b>	Material is stable under normal conditions
<b>Possibility of Hazardous Reactions:</b>	No dangerous reaction known under conditions of normal use
<b>Conditions to Avoid:</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.
<b>Incompatible Materials:</b>	Powerful oxidizers, Chlorine
<b>Hazardous Decomposition Products:</b>	No hazardous decomposition products are known

**Section 11: TOXICOLOGICAL INFORMATION****Information on Likely Routes of Exposure**

<b>Inhalation:</b>	Prolonged inhalation may be harmful
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**Skin Contact:** No adverse effects due to skin contact are expected

**Eye Contact:** Direct contact with eyes may cause temporary irritation

**Ingestion:** Expected to be a low ingestion hazard

**Symptoms Related to the Physical, Chemical and Toxicological Characteristics:** Direct contact with eyes may cause temporary irritation

**Information on Toxicological Effects**

**Acute Toxicity:** Not known

Product	Species	Test Results
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Bentonite

**Acute**

**Inhalation**

*Dust*

LC50	Rat	> 5.27 mg/l, 4hr OECD 436
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**Oral**

*Dust*

LD50	Rat	> 2000 mg/kg OECD 425
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Constituents	Species	Test Results
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CRISTOBALITE (CAS 14464-46-1)

**Acute**

**Oral**

LD50	Rat	> 22500 mg/kg
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**Skin Corrosion/Irritation:** Prolonged skin contact may cause temporary irritation

**Serious Eye Damage/Eye Irritation:** Direct contact with eyes may cause temporary irritation

**Respiratory or Skin Sensitization**

**Respiratory Sensitization:** Not a respiratory sensitizer

**Skin Sensitization:** This product is not expected to cause skin sensitization

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



**SAFETY DATA SHEET****Carcinogenicity:**

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. May cause cancer. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

CRISTOBALITE (CAS 14464-46-1)	1 Carcinogenic to humans
QUARTZ (SiO <sub>2</sub> ) (CAS 14808-60-7)	1 Carcinogenic to humans

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

CRISTOBALITE (CAS 14464-46-1)	Cancer
QUARTZ (SiO <sub>2</sub> ) (CAS 14808-60-7)	Cancer

**US. National Toxicology Program (NTP) Report on Carcinogens**

CRISTOBALITE (CAS 14464-46-1)	Known to be human carcinogen. Reasonably anticipated to be a human carcinogen.
QUARTZ (SiO <sub>2</sub> ) (CAS 14808-60-7)	Known to be human carcinogen

**Reproductive Toxicity:** This product is not expected to cause reproductive or development effects

**Specific Target Organic Toxicity – Single Exposure:** Not classified

**SAFETY DATA SHEET****Specific Target Organic Toxicity – Repeated Exposure:**

Causes damage to organs through prolonged or repeated exposure

**Aspiration Hazard:**

Not an aspiration hazard

**Chronic Effects:**

Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects.

**Section 12: ECOLOGICAL INFORMATION****Ecotoxicity:**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Product****Species****Test Results**

Bentonite

**Aquatic**

Algae EC50

Freshwater Algae

> 100mg/l, 72 hours

Crustacea EC50

Coon stripe shrimp (Pandalus danae)

24.8 mg/l, 96 hours

Daphnia

> 100 mg/l, 48 hours

Dungeness or edible crab (Cancer magister)

81.6 mg/l, 96 hours

Fish LC50

Freshwater fish

16000 mg/l, 96 hours

Marine water fish

2800-3200 mg/l, 24 hours

**Chronic**

Crustacea LC50

Opossum shrimp (Americamysis bahia)

1000000 ppm, 96 h

**Product****Species****Test Results**

BENTONITE (CAS 1302-78-9)

**Aquatic****Acute**

Fish LC50

Rainbow trout, Donaldson trout (Americamysis bahia)

19000 mg/l, 96 hours

**Persistence and Degradability:**

No data is available on the degradability of any ingredients in the mixture

**Bioaccumulative Potential****Mobility in Soil:**

No data available

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**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.

## Section 13: DISPOSAL CONSIDERATIONS

**Disposal Instructions:** 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.

## Section 14: TRANSPORT INFORMATION

**DOT:** Not regulated as dangerous goods

**IATA:** Not regulated as dangerous goods

**IMDG:** Not regulated as dangerous goods

**Transport in Bulk According to Annex II of MARPOL and the IBC Code:** Not applicable

## Section 15: REGULATORY INFORMATION

**US Federal Regulations:** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

### Toxic Substances Control Act (TSCA)

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D):** Not regulated

**CERCLA Hazardous Substance List (40 CFR 302.4):** Not listed

**SARA 304 Emergency release notification:** Not regulated

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

CRISTOBALITE (CAS 14464-46-1)	Cancer
QUARTZ (SIO <sub>2</sub> ) (CAS 14808-60-7)	Cancer

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CRISTOBALITE (CAS 14464-46-1)	Lung Effects
QUARTZ (SIO2) (CAS 14808-60-7)	Lung Effects
CRISTOBALITE (CAS 14464-46-1)	Immune system effects
QUARTZ (SIO2) (CAS 14808-60-7)	Immune system effects
CRISTOBALITE (CAS 14464-46-1)	Kidney effects
QUARTZ (SIO2) (CAS 14808-60-7)	Kidney effects

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**SARA 302 Extremely Hazardous Substance:** Not listed

**SARA 311/312 Hazardous Chemical:** No (Exempt)

**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

**Safe Drinking Water Act (SDWA):** Not regulated

**Food and Drug Administration (FDA):** Total food additive  
Direct food additive  
GRAS food additive

**US State Regulations**

**California Proposition 65**



**WARNING:** This product can expose you to QUARTZ (SIO2), which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

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

QUARTZ (SIO2) (CAS 14808-60-7) Listed: October 1, 1988

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

CRISTOBALITE (CAS 14464-46-1)

QUARTZ (SIO2) (CAS 14808-60-7)

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International Inventories

Country(s) or Region	Inventory Name	On Inventory (yes/no)*
Australia	Australia Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory	Yes
Unites 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)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**Section 16: OTHER INFORMATION**

**HMIS® Ratings:** Health: 3  
Flammability: 0  
Physical Hazard: 0

**NFPA Ratings:** Health: 2  
Flammability: 0  
Instability: 0

**Version #:** 45

**Prepared by:** Bri-Chem Supply Ltd.

**Revision Date:** May 17, 2024

**Disclaimer**

The information contained herein is based on data available to us and is believed to be true and accurate. However, no guarantee or warranty is provided, expressed or implied, by the company or its subsidiaries regarding accuracy of the information, the hazards connected with the use of the material, or the results to be obtained from the use thereof. Since the use of this product is within the exclusive control of the user, we do not assume any responsibility and expressly disclaim any liability for any use of this product. It is the user's responsibility to determine the conditions of safe use, storage, and disposal of the product. Compliance with all applicable federal, provincial, and local regulations remains the responsibility of the user.