

## Safety Data Sheet

**SECTION 1. IDENTIFICATION****Product Identifier:** VineCo Winemaking kits

Components	Quantity	SDS Requirements
Potassium Metabisulphite/Sorbate	1	Yes
Kieselsoil	1	Yes
Chitosan	1	Yes
Bentonite	1	Yes
Juice Bladder	1	No
May contain oak shavings, chips, or cubes	Varies	No
May contain a susse reserve	1	No
May contain a sweet reserve	Varies	No

**Recommended Use:** Home Wine Making**Restrictions on Use:** This product produces an alcohol containing beverage and should not be sold to minors**Manufacturer Name and Address:**

Global Vintners Inc.  
27 Scott Street. West,  
St. Catharines,  
ON Canada L2R 1E1

**Emergency Telephone Number:** 905-685-9342**Preparation Date of SDS:** Sept 19, 2023

## Safety Data Sheet

### SECTION 1. IDENTIFICATION

**Product Identifier:** Potassium Sorbate  
**Other Means of Identification:** none  
**Recommended Use:** Food Additive  
**Restrictions on Use:** As per preparation instruction

**Supplier Name and Address:** Global Vintners Inc.  
27 Scott Street. West,  
St. Catharines,  
ON Canada L2R 1E1  
**Emergency Telephone Number:** 905-685-9342  
**Preparation Date of SDS:** Sept 19, 2023

SDS provided by request of customer

### SECTION 2. HAZARD IDENTIFICATION:

**Classification:**



**Potential Acute Health Effects:**

**Eye Contact:** Cause serious eye irritation. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Disposal:** Dispose of contents/container to an approved waste disposal plant.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration %	Common name / Synonyms	Other identifiers
2, 4- Hexadienoic,(E,E)- Potassium Salt	590-00-1/ 24634-61-5	99	n/a	n/a

### SECTION 4. FIRST-AID MEASURES

**Eye Contact:** In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

**Skin Contact:** Flush skin with large amounts of water. If irritation persists, get medical attention. Remove contaminated clothing and launder before reuse.

**Inhalation:** Move person to fresh air. If irritation persists, seek medical attention.

**Ingestion:** If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

**Notes to Physician:** Treatment based on sound judgment of physician and individual reactions of patient.

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** Alcohol-resistant foam; DRY powder; Carbon Dioxide; water spray jet.

**Special Exposure Hazards:** No Data Available.

**Hazardous Decomposition/Combustion Materials (under fire conditions):** Carbon monoxide (CO), Large amounts of soot are formed in burning.

**Special Protective Equipment:** Fire fighters should wear full protective clothing, including self-contained breathing equipment.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Avoid breathing dust.

**Environmental Precautionary Measures** Do not let product enter drains.

**Procedure for Clean Up:** Ventilate area. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

## SECTION 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes and skin.

This product is not flammable, keep ignition sources away-Do not smoke and protect against electrostatic charges.

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Storage:** Store in cool, dry conditions in well-sealed receptacles, Protect from exposure to the light and physical damage. Dry to avoid tendency of product to cake.

## SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

**Personal Protective Equipment (PPE).**



**Engineering Controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

**Respiratory Protection:** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Skin Protection:** Avoid contact with skin. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Full contact**

Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm  
Break through time: 480 min  
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

**Splash contact**

Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm  
Break through time: 480 min  
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario. **Eyes:** Safety glasses (with side shields). Do NOT wear contact lenses.

**Other Personal Protection Data:** Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Ingredients Exposure Limit - ACGIH Exposure Limit -** Do not let product enter drains.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Solid Granular, Spherical powder

**Color:** White / Off White

**Odor:** No Data Available **pH:**  
8.5-10.5

**Specific Gravity:** 1.48

**Autoignition Temperature:** >150°C

**Freezing/Melting Point:** 133-135°C

**Vapor Pressure:** Not Available. **Relative**

**Density:** 1.363g/cm<sup>3</sup>

**% Volatile by Volume:** Not Available.

**Evaporation Rate:** Not Available.

**Solubility:** Soluble in water.

**VOCs:** Not Available.

**Viscosity:** Not Available.

**Molecular Weight:** Not Available.

**Other:** Not Available.

## SECTION 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under recommended storage conditions.

**Hazardous Polymerization:** Not Available.

**Conditions to Avoid:** Not Available

**Materials to Avoid:** Not Available

**Hazardous Decomposition Products:** In the event of a fire Carbon oxides, Potassium oxides

**Additional Information:** Not Available

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

### Acute Oral Toxicity

Animal Data

Product	Test	Species	Quantity
Potassium Sorbate	LD50- Oral	Rat	4920 mg/kg
Sorbic Acid	LD50 – Dermal	Rat	4920 mg/kg

## SECTION 12. ECOLOGICAL INFORMATION

**Toxicity:** Ecological data is not available as this has not been monitored into the environment.

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal of Waste Method:** Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. *Do not let product enter drains. Discharge into the environment must be avoided.*

**Contaminated Packaging:** Contaminated packaging - Dispose of as unused product.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Technical Name (for N.O.S. entry)	Transport Hazard Class(es)	Packing Group
n/a	n/a	Not regulated	n/a	n/a	n/a

## SECTION 15. REGULATORY INFORMATION

**U.S. TSCA Inventory Status:** No Data Available

**Canadian DSL Inventory Status:** No Data Available

**UK- National Regulations:** No Data Available

## **SECTION 16. OTHER INFORMATION**

**Additional Information:** This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

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## Safety Data Sheet

### SECTION 1. IDENTIFICATION

**Product Identifier: Potassium Metabisulphite**  
**Other Means of Identification: Dipotassium Disulphite**  
**Recommended Use: Food Additive**  
**Restrictions on Use: As per preparation instruction**

**Supplier Name and Address: Global Vintners Inc.**  
**27 Scott Street. West,**  
**St. Catharines,**  
**ON Canada L2R 1E1**  
**Emergency Telephone Number: 905-685-9342**  
**Preparation Date of SDS: Sept 19, 2023**

### SECTION 2. HAZARD IDENTIFICATION:

**SDS provided by request of customer**

**Classification:**



**Label Elements:**

Cause eye irritation and serious eye damage **Precautionary**

**Statements:**

Prevention: Wear protective gloves/protective clothing/eye protection/face protection.

Response: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**IF SWALLOWED:**

Immediately call a POISON CENTER or Doctor/physician. If you feel unwell. Rinse Mouth.

Storage: Store in a well-ventilated place. Keep cool

Disposal: Dispose of contents/container to an approved waste disposal plant.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Classification	Concentration
Dipotassium disulphite	16731-55-8 240-795-3	Eye Dam. 1; H318, EUH031	100%

### SECTION 4. FIRST-AID MEASURES

**Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Skin Contact:** Wash off with soap and plenty of water. Consult a physician.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician

**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.  
**Notes to Physician:** Treatment based on sound judgment of physician and individual reactions of patient.

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** Water and Dry powder

**Special Exposure Hazards:** Sulphur oxides, Potassium oxides

**Hazardous Decomposition/Combustion Materials (under fire conditions):** Carbon monoxide (CO)

**Special Protective Equipment:** Fire fighters should wear full protective clothing, including self-contained breathing equipment.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Avoid breathing dust.

**Environmental Precautionary Measures** Do not let product enter drains.

**Procedure for Clean Up:** Ventilate area. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

## SECTION 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes and skin.

This product is not flammable, keep ignition sources away-Do not smoke and protect against electrostatic charges.

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Storage:** Keep in a dry, cool, and well-ventilated place. Do not store together with oxidizing agents. Protect from acids and acids forming substances

## SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

**Personal Protective Equipment (PPE).**



**Engineering Controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)



**Skin Protection:** Avoid contact with skin. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Full contact**

Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm  
Break through time: 480 min  
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

**Splash contact**

Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm  
Break through time: 480 min  
Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Other Personal Protection Data:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Ensure that eyewash stations and safety showers are proximal to the work-station location. Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Environmental Exposure** - Do not let product enter drains.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Solid Powder

**Color:** White **Odor:** Slightly pungent **pH :** (at 50 g/l 200°C) 3.5 – 4.5

**Freezing/Melting Point:** 1900C starts to decompose at 1500°C

**Vapor Pressure:** No Data Available

**Bulk Density:** 1100-1300 kg/m<sup>3</sup>

**Solubility:** (200°C) 450 g/l water

## SECTION 10. STABILITY AND REACTIVITY

**Chemical Stability:** Starts to decompose at 1500C .

**Hazardous Polymerization:** Nitrites, nitrate, oxidizing agent

**Conditions to Avoid:** No Data Available

**Materials to Avoid:** Acids, NaNO<sub>2</sub>, NaNO<sub>3</sub>, oxidizing agent

**Hazardous Decomposition Products:** In the event of a fire Sulphur Dioxide is present

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Acute Oral Toxicity

##### Animal Data

Product	Test	Species	Quantity
Potassium Metabisulphite	LD50- Oral	Rat	2300 mg/kg

**Respiratory or Skin Sensitization:** The substance may cause sensitization of the respiratory tract on particularly sensitive individuals. Can sensitize the skin and/or respiratory tract of allergic persons.

## SECTION 12. ECOLOGICAL INFORMATION

**Toxicity:** Ecological data is not available as this has not been monitored into the environment.

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal of Waste Method:** Must be dumped or incinerated in accordance with local regulations. Special Waste. *Do not let product enter drains. Discharge into the environment must be avoided.*

**Contaminated Packaging:** Contaminated packs should be emptied as far as possible; they can then be passed on for recycling after being thoroughly cleaned.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Technical Name (for N.O.S. entry)	Transport Hazard Class(es)	Packing Group
n/a	n/a	Not regulated	n/a	n/a	n/a

## SECTION 15. REGULATORY INFORMATION

**U.S. TSCA Inventory Status:** No Data Available

**Canadian DSL Inventory Status:** No Data Available

**UK- National Regulations:** No Data Available

## SECTION 16. OTHER INFORMATION

**Additional Information:** This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

**Disclaimer:** NOTICE TO READER:



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# Safety Data Sheet

## SECTION 1. IDENTIFICATION

**Product Identifier:** Kieselso

**Other Means of Identification:** n/a

**Recommended Use:** Inorganic binder and surface modifier **Restrictions on Use:** As per preparation instruction

**Supplier Name and Address:** Global Vintners Inc.

27 Scott Street. West,  
St. Catharines,  
ON Canada L2R 1E1

**Emergency Telephone Number:** 905-685-9342

**Preparation Date of SDS:** Sept 19, 2023

## SECTION 2. HAZARD IDENTIFICATION:

**SDS provided by request of customer**

**Classification:**

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. **Label**

**Elements:** n/a

**Precautionary Statements:** n/a

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Concentration
Dipotassium disulphite	16731-55-8 240-795-3	30-60%

## SECTION 4. FIRST-AID MEASURES

This substance contains no hazardous components.

**Eye Contact:** Rinse with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing.

**Skin Contact:** Remove contaminated clothing. Rinse with water

**Inhalation:** If breathed in, move person into fresh air. Consult a physician

**Ingestion:** Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person.

**Notes to Physician:** No Data Available

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Special Exposure Hazards:** No hazards to be specially mentioned

**Hazardous Decomposition/Combustion Materials (under fire conditions):** No hazardous combustion products are known

**Special Protective Equipment:** In the event of fire, wear self-contained breathing apparatus

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures:** No conditions to be specially mentioned.

**Environmental Precautionary Measures:** No special environmental precautions required.

**Procedure for Clean Up:** Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum.

## SECTION 7. HANDLING AND STORAGE

**Handling:** No special handling advice required.  
Normal measures for preventive fire protection.

**Storage:** Keep container tightly closed in a dry and well-ventilated place. Store in closed dark containers made of anticorrosive material.

No special restrictions on storage with other products.

Minimum storage temperature: Avoid temperatures below: 5 °C Maximum storage temperature: 35 °C.

## SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

**Control Parameters:**

Components	CAS-No	Value	Control Parameters	Basis	Form of Exposure
Silicon dioxide, amorphous	7631-86-9	TWA	6 mg/m <sup>3</sup>	GB EH40	Inhalable
		TWA	2.4 mg/m <sup>3</sup>	GB EH40	Respirable

**Further information: 15:** For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

**Exposure Control:**

**Personal Protective Equipment (PPE)**



**Engineering Controls:** Effective exhaust ventilation system

Hand Protection: PVC Rubber gloves

Eye Protection: Safety Glasses

Respiratory Protection: No personal respiratory protective equipment normally required

**Environmental Exposure:** No special environmental precautions required.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid

**Color:** White

**Odor:** Odourless

**Flammability:** The product is not flammable **pH:** 9-10

**Autoignition Temperature:** n/a

**Freezing/Melting Point:** 0 °C

**Vapor Pressure:** ca. 23 hPa at 20 °C

**Bulk Density:** 1100-1300 kg/m<sup>3</sup>

**Initial Boiling Point:** 100 °C

**Viscosity, kinematic:** < 20 mPa.s

**Relative vapour density:** 1.100 - 1.300

**Solubility:** Dispersible

**Explosive properties:** Not explosive

## SECTION 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable under recommended storage conditions.

**Hazardous Polymerization:** No dangerous reaction known under conditions of normal use.

**Conditions to Avoid:** Avoid drying out of the solution as this can lead to a build-up of dust.

**Materials to Avoid:** Mild steel, Aluminium, Copper

**Hazardous Decomposition Products:** No hazardous decomposition products are Known.

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

### Acute Oral Toxicity

Animal Data

Product	Test	Species	Quantity
Silicon dioxide, amorphous	LD50- Oral	Rat	> 10,000 mg/kg

**Acute Toxicity:** May cause irritation of the mucous membranes.

**Respiratory or Skin Sensitisation:** May cause respiratory tract irritation.

**Skin corrosion/Irritation:** Causes mild skin irritation.

**Serious eye damage/eye irritation:** May cause eye irritation.

**Germ cell mutation:** Negative

## SECTION 12. ECOLOGICAL INFORMATION

Product	Species	Test	Value	Exposure Time
Silicon dioxide, amorphous	Danio rerio (zebra fish)	LC50:	> 5,000 mg/l	96 h
	Ceriodaphnia Dubia (water flea)	EC50:	7,600 mg/l	48 h
	Selenastrum capricornutum (green algae)	NOEC:	60 mg/l	48 h
	Selenastrum capricornutum (green algae)	EC50:	120 mg/l	48 h
	Selenastrum capricornutum (green algae)	EC10:	140 mg/l	48 h

**Persistence and degradability:** Inorganic

**Bio accumulative potential:** No bioaccumulation is expected.

**Mobility in soil:** Under extreme circumstances, transport from earth to water may take place.

## SECTION 13. DISPOSAL CONSIDERATIONS

**Contaminated Packaging:** Empty remaining contents. Empty Package should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Technical Name (for N.O.S. entry)	Transport Hazard Class(es)	Packing Group
n/a	n/a	Not regulated	n/a	n/a	n/a

## SECTION 15. REGULATORY INFORMATION

**U.S. TSCA Inventory Status:** No Data Available

**Canadian DSL Inventory Status:** No Data Available

**National Regulations (UK):** No Data Available

## SECTION 16. OTHER INFORMATION

**Additional Information:** This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.



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## Safety Data Sheet

### SECTION 1. IDENTIFICATION

**Product Identifier:** Chitosan  
**Other Means of Identification:** n/a  
**Recommended Use:** Fining agent  
**Restrictions on Use:** None known

**Supplier Name and Address:** Global Vintners Inc.  
27 Scott Street. West,  
St. Catharines,  
ON Canada L2R 1E1  
**Emergency Telephone Number:** 905-685-9342  
**Preparation Date of SDS:** Sept 19, 2023

### SECTION 2. HAZARD IDENTIFICATION:

SDS provided by request of customer

**Classification:**

Eye Irritant (Category 2); H319: Causes serious eye irritation. **Label**

**Elements:**



Warning

**Precautionary Statements:**

Wash contaminated skin thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
If eye irritation persists: Get medical advice/attention.  
Use personal protective equipment as required.

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS Chemical

Name	CAS-No.	Concentration	
Malic Acid	617-48-1 210-514-9	4-5%	

### SECTION 4. FIRST-AID MEASURES

Consult a physician, Show this safety data sheet to the doctor in attendance.

**Eye Contact:** Remove any contact lenses if possible and safe to do so and open eye lids wide apart. Rinse well with water for at least 15 minutes. Get medical attention if any discomfort continues

**Skin Contact:** Remove affected person from the source of contamination. Remove any contaminated clothing.

Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Get medical attention if any discomfort continues.

**Ingestion:** Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

**Notes to Physician:** No Data Available.

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** Use water spray, alcohol resistant foam, dry chemical, or carbon dioxide. Dry chemical Alcohol-resistant foam, Carbon dioxide (CO<sub>2</sub>), Water spray

**Special Exposure Hazards:** No hazards to be specially mentioned

**Hazardous Decomposition/Combustion Materials (under fire conditions):** Carbon oxides, Nitrogen oxides (NO<sub>x</sub>)

**Special Protective Equipment:** Wear self-contained breathing apparatus for Firefighting if necessary

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures:** Wear protective clothing as described in section 8. Avoid dust formation, avoid breathing vapors, mist, or gas. Ensure adequate ventilation.

**Environmental Precautionary Measures:** Prevent further leakage or spillage if safe to do so. Avoid discharge into drains or watercourse or onto the ground.

**Procedure for Clean Up:** Stop leak, if possible, without risk. Absorb in Vermiculite, dry sand or earth and place into containers. Flush contaminated area with Plenty of water. Collect the remaining powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely.

## SECTION 7. HANDLING AND STORAGE

**Handling:** Avoid spilling and contact with skin and eyes. Avoid handling which leads to dust formation. Provide adequate ventilation. Normal measures for preventive fire protection.

**Storage:** Store in tightly- closed, original container in a dry, cool and well-ventilated place.

## SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

**Control Parameters:**

**WEL (UK) Long or short exposure limit:** No Data Available for the product itself.

**Exposure Control:**

**Personal Protective Equipment (PPE)**



**Engineering Controls:** Handle in accordance with good industrial hygiene and safety practice.

**Eye Protection:** Ensure eye protection is dust resistant, chemical splash goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Respiratory Protection:** Choose body protection in relation to its type, to the concentration and number of dangerous substances, and to the specific workplace., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Skin Protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

#### **Full contact**

Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm  
Break through time: 480 min  
Material tested: Dermatril® (KCL 740 / Aldrich  
Z677272, Size M)

#### **Splash contact**

Material: Nitrile rubber  
Minimum layer thickness: 0.11 mm  
Break through time: 480 min  
Material tested: Dermatril® (KCL 740 / Aldrich  
Z677272, Size M)

Test method: EN374

If used in solution or mixed with other substances and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Environmental Exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Liquid, Viscous

**Color:** Colourless

**Odor:** Slight smell of sulphur

**pH:** 2.3-2.5 at 20°C

**Bulk Density:** 1100-1300 kg/m<sup>3</sup>

**Relative density:** 1.02g/ml at 20°C

**Solubility:** Water soluble

## **SECTION 10. STABILITY AND REACTIVITY**

**Chemical Stability:** Stable at normal, ambient temperature.

**Hazardous Polymerization:** There are no known reactivity hazards associated with this product.

**Conditions to Avoid:** Avoid excessive heat for prolonged periods of time.

**Materials to Avoid:** Oxidising materials, Alkalis Amines, Carbonates, and alkali metals.

**Hazardous Decomposition Products:** Fire creates Carbon monoxide and carbon dioxide.

## SECTION 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

#### Acute Oral Toxicity

##### Animal Data

Product	Test	Species	Quantity
Malic Acid	LD50-Oral	Rat	>5000 mg/kg
	LD50-Inhalation	Rat	>1306 mg/l
Chitosan	LD50-Oral	Rat	>10 000 mg/kg
Sodium Metabisulphite	LD50	Rat	1,540 mg/kg
	LD50 Dermal	Rat	> 2,000 mg/kg

**Acute Toxicity:** No Data Available

**Respiratory or Skin Sensitisation:** No Data Available **Skin**

**corrosion/Irritation:** May irritate the skin.

**Serious eye damage/eye irritation:** May cause eye irritation.

## SECTION 12. ECOLOGICAL INFORMATION

Product	Species	Test	Value	Exposure time
Chitosan	Oncorhynchus mykiss (Rainbow trout)	LC50	1.73mg/l	96 hr
	Daphnia pulex (Water flea)	EC50	13.69 mg/l	48 hr
Malic Acid	Brachydanio rerio (Zebra fish)	LC50	>100 mg/l	96 hr
	Daphnia Magna	EC50	>240mg/l	48 hr
	Pseudokirchneriella subcapitata	EC50	>100 mg/l	72 hr
Sodium Metabisulphite	Oncorhynchus mykiss (rainbow trout)	LC50	150 - 220 mg/l	96 hrs
	Daphnia magna (Water flea)	EC50	89 mg/l	24 hrs
	Desmodesmus subspicatus (green algae)	IC50	48 mg/l	72 hrs
	Pseudomonas putida		56 mg/l	17 hrs

**Persistence and degradability:** Not readily biodegradable

**Bio accumulative potential:** No Data Available

**Mobility in soil:** No Data Available

## SECTION 13. DISPOSAL CONSIDERATIONS

**Contaminated Packaging:** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local waste disposal authority. Dispose of a used product.

**Waste Treatment:** Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an after burn and scrubber.

**Sewage disposal:** Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Technical Name (for N.O.S. entry)	Transport Hazard Class(es)	Packing Group
n/a	n/a	Not regulated	n/a	n/a	n/a

## SECTION 15. REGULATORY INFORMATION

**U.S. TSCA Inventory Status:** No Data Available

**Canadian DSL Inventory Status:** No Data Available

**National Regulations (UK):** No Data Available

## SECTION 16. OTHER INFORMATION

**Additional Information:** This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

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# Safety Data Sheet

## SECTION 1. IDENTIFICATION

**Product Identifier:** Bentonite

**Other Means of Identification:** Smectite \* Bentonite \* Bentonite, Sodian \* Bentonite, Calcian \* Sodium-activated Bentonite \* Montmorillonite.

**Recommended Use:** Bentonite has a variety of uses. It can be used as a rheology modifier, binding agent, adsorbent, hydraulic-barrier, and filler.

**Restrictions on Use:** None known

**Supplier Name and Address:** Global Vintners Inc.  
27 Scott Street. West,  
St. Catharines,  
ON Canada L2R 1E1  
**Emergency Telephone Number:** 905-685-9342

**Preparation Date of SDS:** Sept 19, 2023

## SECTION 2. HAZARD IDENTIFICATION:

**SDS provided by request of customer**

**Classification:**

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended

**Label Elements:** N/A

**Precautionary Statements:** N/A

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Classification
Calcium carbonate	471-34-1 207-439-9	-
Cristobalite	14464-46-1 238-455-4	<2
Quartz	14808-60-7 238-878-4	<8
SMECTITE GROUP MINERALS	1318-93-0 215-288-5	-

## SECTION 4. FIRST-AID MEASURES

No hazards which require special first aid measures. Provide general supportive measures and treat symptomatically.

**Eye Contact:** No specific first aid measures noted. Flush thoroughly with water. If irritation occurs, get medical assistance.

**Skin Contact:** No specific first aid measures noted. Wash skin with soap and water. Get medical attention if irritation develops and persists.

**Inhalation:** No specific first aid measures noted. Move to fresh air. Call a physician if symptoms develop or persist.

**Ingestion:** No specific first aid measures noted. Rinse mouth thoroughly. Get medical attention if any discomfort occurs.

**Notes to Physician:** No Data Available

## SECTION 5. FIRE-FIGHTING MEASURES

**Extinguishing Media:** This material will not burn. Use any media suitable for the surrounding fires.

**Special Exposure Hazards:** No hazards to be specially mentioned

**Hazardous Decomposition/Combustion Materials (under fire conditions):** Not applicable, non-combustible.

**Special Protective Equipment:** Material can be slippery when wet

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautionary Measures:** No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product. Avoid generation and spreading of dust. Avoid inhalation of dust. Wear a dust mask if dust is generated above exposure limits. Material can be slippery when wet.

**Environmental Precautionary Measures:** No special environmental precautions required. Prevent further leakage or spillage if safe to do so.

**Procedure for Clean Up:** Avoid the generation of dusts during clean-up. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container.

## SECTION 7. HANDLING AND STORAGE

**Handling:** In case of insufficient ventilation, wear suitable respiratory equipment. Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed.

**Storage:** Store in a dry area. Keep the container dry. No special restrictions on storage with other products.

## SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

**Control Parameters:**

**WEL (UK) Long or short exposure limit:** No Data Available for the product itself.

Constituents	Type	Value	Form
INERT OR NUISANCE DUSTS (SEQ250)	TWA	4 mg/m <sup>3</sup>	Respirable dust.
		10 mg/m <sup>3</sup>	Inhalable dust.



## Exposure Control:

### Personal Protective Equipment (PPE)



**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

**Eye Protection:** Wear dust-resistant safety goggles where there is danger of eye contact.

**Respiratory Protection:** Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

**Skin Protection:** No protection is ordinarily required under normal conditions of use

**Environmental Exposure:** Contain spills and prevent releases and observe national regulations on emissions.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Solid, Lump, granular or fine powder.

**Color:** Various

**Odor:** None

**Decomposition Temperature:** > 500 °C (> 932 °F) **pH:** 8.5-11

**Melting point/freezing point:** > 450 °C (> 842 °F)

**Bulk Density:** 0.9 - 1.4 g/cm<sup>3</sup>

**Relative density:** 2.6 g/cm<sup>3</sup>

**Water Solubility:** < 0.9 mg/l

## SECTION 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable at normal, ambient temperature.

**Hazardous Polymerization:** will Not occur.

**Conditions to Avoid:** Moisture.

**Materials to Avoid:** None known.

**Hazardous Decomposition Products:** None.

## SECTION 11. TOXICOLOGICAL INFORMATION

**Information on toxicological effects:** Bentonite with less than 10% w/w crystalline silica does not meet the criteria for classification as hazardous according to EC Regulation 1272/2008 and Directive 67/548/EC as amended.

Product	Test	Species	Quantity	Exposure time
Bentonite	LC50- Inhalation	Rat	> 5.27 mg/l	4 hr
	LD50 - Oral	Rat	> 2000 mg/kg	-

**Acute Toxicity:** No Data Available

**Respiratory or Skin Sensitisation:** Not classified. Inhalation of dusts may cause respiratory irritation.

**Skin corrosion/Irritation:** May irritate the skin.

**Serious eye damage/eye irritation:** May cause eye irritation.

**Carcinogenicity:** The product does not meet the criteria for classification as hazardous according to EC Regulation 1272/2008 and Directive 67/548/EC as amended. The product contains less than 1% w/w RCS (respirable crystalline silica).

**Mixture versus substance information:** Bentonite is a UVCB substance sub-type 4. The purity of the product is 100 % w/w. Bentonite is composed mainly of smectite group minerals, but the composition is varied, as expected for a UVCB substance, and other mineral constituents will be present in small and varying amounts. These minor constituents are not relevant for classification and labelling.

## SECTION 12. ECOLOGICAL INFORMATION

Product	Species	Test	Value	Exposure Time
BENTONITE	Coon stripe shrimp ( <i>Pandalus dana</i> ♂)	EC50	24.8 mg/l	96 hrs
	Daphnia	EC50	> 100 mg/l	48 hrs
	Dungeness or edible crab ( <i>Cancer magister</i> )	EC50	81.6 mg/l	96 hrs
	Freshwater algae:	EC50	> 100 mg/l	72 hrs
	Freshwater fish:	LC50	16000 mg/l	96 hrs
	Marine water fish	LC50	2800 - 3200 mg/l	24 hrs
	Rainbow trout, donaldson trout ( <i>Oncorhynchus mykiss</i> )	LC50	19000 mg/l	96 hrs

**Persistence and degradability:** Not relevant for inorganic substances. **Bio**

**accumulative potential:** Will not bio-accumulate.

**Mobility in soil:** The product has poor water-solubility

**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

**Contaminated Packaging:** Store containers and offer for recycling of material when in accordance with the local regulations.

**Waste Treatment:** Dispose of in accordance with local regulations.

**Sewage disposal:** Dispose in accordance with all applicable regulations.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Technical Name (for N.O.S. entry)	Transport Hazard Class(es)	Packing Group
n/a	n/a	Not regulated	n/a	n/a	n/a

## SECTION 15. REGULATORY INFORMATION

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