

# ZUMSIL

**Guaranteed Analysis** - Silicon Dioxide (SiO<sub>2</sub>) 18%  
Available Silicon (Si) 20%

## Directions for Use/Application rates:

**To bare soil:** Use 2 liter of product diluted with minimum 100 litres (22 gallons) of clean water applied by sprayer or overhead irrigation. Repeat as necessary based on soil tests and advice from a professional crop advisor, not to repeat applications less than 30 days apart.

## Dilution Rates:

**Foliar Spray:** The dilution rate should be 1:1000.

**Drip Irrigation:** The dilution rate should be 1:1500 with a minimum of 1:1200.

**Mixing Instruction: Important:** Do not pre-mix! Add clean water. Add ZumSil at recommended rate. Mix well. Add remaining agro chemicals. (additives, crop protection). Apply within 4 – 8 hours.

**Warnings:** Do not mix with acids as product is highly alkaline

## Storage and Handling:

\*always mix well before use.

Keep at room temperature.

Containers must be closed when not in use.

In case of spills wash with water.

Caution: wet surfaces are slippery.

## Health and Emergency First Aid:

Keep out of reach from children and pets.

Use rubber gloves and standard eye protection.

Eye contact: eye irritant – flush eyes with water.

Skin contact: skin irritant - flush with water.

Ingestion: may cause stomach pain, nausea, cramps and vomiting. Seek immediate medical attention.

Avoid Inhalation. Use of an appropriate mask is advised.

There is no warranty, either expressed or implied, concerning the use of this product other than indicated on the label, by distributor or manufacturer of this product. The recommendations herein for the use of this product are based on tests believed to be reliable. Recommendation of a professional consultant, actual use, and actual application of the product are beyond the control of the manufacturer and distributor, and therefore no guarantees or warranties are expressed or implied relating to the effectiveness or performance of the product.

Registration Number: 2016009A Fertilizers Act

Lot number: Container size: \_\_\_ 10 litre \_\_\_ 1000 litre

## Distributed by:

High Brix Manufacturing  
25147 TWP 490,  
Leduc County, Alberta, T4X 2N4



Crop	Mls per 4047 m <sup>2</sup> ( 1 acre)	Foliar Application or Fertigation
Peach	150-210 mls	Every 15 days from flowering to fruit formation
Grape	150-210 mls	Every 15 days from early shoots (3') to ripening
Kiwi	150-210 mls	Every 10-15 days from pre-flowering to ripening
Melons	150-210 mls	Every 12 days from first vegetative growth to ripening
Strawberries	150-210 mls	Every 10 – 15 days from planting to start of overwintering, then from re growth the following year to pre harvest.
Zucchini	150-210 mls	Every 15 days from vegetative growth to pre-harvest
Tomatoes	150-210 mls	Every 8 – 10 days from transplant to fruit
Sweet Peppers	150-210 mls	Every 10 – 12 days from after flowering to pre-harvest
Cucumbers	150-210 mls	Every 10 -12 days from initial vegetative to pre-harvest
Potatoes	150-210 mls	Every 8 -10 days during most intensive growth period
Leeks	150-210 mls	Every 15 days from initial vegetative growth to pre-harvest
Onions	150-210 mls	Every 15 days during critical phase of production growth
Garlic	150-210 mls	Every 8 – 10 days during most extensive growth period.
Legumes	150-210 mls	Every 15 days from germination to pre-harvest
Eggplant	150-210 mls	Every 8 – 12 days from transplant to full production
Lettuce	150-210 mls	Every 10 – 15 days from germination to pre-harvest
Vegetables (Leafy Greens)	150-210 mls	Every 10-15 days from germination to pre-harvest
Rice	300 -360 mls	First at germination, followed by application with herbicide
String Beans	150-240 mls	Repeat application every 10 – 15 days
Grain Crops	450 – 600 mls	At Germination, followed by application with herbicide/fungicide – again as seed set with fungicide if needed
Green House (Floriculture)	60-120 mls Per 50 square meters.	Every 10 – 15 days from germination to pre-harvest

# MATERIAL SAFETY DATA SHEET

ZumSil

Version 001

Last review  
07.08.2023

## Section 1 Identification of the mixture and of the company

### 1.1 Product identifier

Product name ZumSil  
Synonyms MONO-SILIC ACID

### 1.2 Relevant identified uses of the mixture and uses advised against

Use of the product Fertilizer  
Uses advised against No information available at present.

### 1.3 Details of the supplier of the Safety Data Sheet

Manufacturer Terra Tech Int. LLC  
320 S. Flamingo Rd. #339  
Pembroke Pines, FL 33027  
USA  
Supplier High Brix Manufacturing Inc.  
Address 25147 Township Road 490  
Leduc County, AB - T4X 2N4  
Phone (technical) +1 587-671-0111  
E-mail info@highbrixmanufacturing.com

### 1.4 Emergency telephone number

Phone (medical) +1-844 POISON-X(764-7669)  
(Canada Poison Control Center)

## Section 2 Hazards identification

### 2.1 Classification of the mixture

**NFPA Ratings:** Health: 1 Flammability: 0 Reactivity: 0

### 2.2 Label elements

**Label Hazard Warning:** Non-hazardous.  
**Label Precautions:** None.  
If swallowed, do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. In all cases call a physician.

### Label First Aid:

### 2.3 Emergency Overview

HAZARDOUS in case of eye contact, ingestion or inhalation.

### 2.4 Terra Tech International SAFETY-Ratings (Provided here for your convenience)

Health Rating: 1 – Slightly hazardous, Irritant  
Flammability Rating: 0 – nonflammable  
Reactivity Rating: 0 – Nonreactive  
Contact Rating: 0 – Non-hazardous  
Lab Protective Equip: EYE PROTECTION (GOGGLES); LAB COAT or APRON; PROPER GLOVES  
Storage Color Code: White

### 2.5 Potential Health Effects

**Inhalation:** May cause respiratory tract irritation.  
**Ingestion:** Ingestion is unlikely to have any toxic effects, but the product may act as an intestinal irritant.  
**Skin Contact:** Harmful effects are not expected from short periods of exposure. Prolonged or repeated exposure may cause irritation.  
**Eye Contact:** May cause eye irritation; Symptoms may include discomfort or pain, excessive blinking, and tear production.  
**Chronic Exposure:** Prolonged lung contact to the respiratory tract may cause irritation. Prolonged skin contact may lead to irritation. No target organ chronic effects under normal conditions of use.

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**Aggravation of Pre-existing Conditions:**

Because of its irritating properties, dust and allergens may aggravate pre-existing eye, skin, and respiratory conditions.

### Section 3 Composition/information on ingredients

Ingredients	CAS Number	Percentage	Hazardous
WATER	7732-18-5	76 %	No
MONO-SILICIC ACID	7699-41-4	24 %	No

### Section 4 First aid measures

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. Exposed persons should be kept under medical observation for 24 hours. Inhalation is not a normal route of exposure.

**Ingestion:** Treat systematically. Not expected to be toxic by ingestion.

**Skin Contact:** No emergency care is anticipated. Wash skin with soap and water. Remove contaminated clothing. Wash clothing before reuse. Obtain medical attention if irritation persists.

**Eye Contact:** No emergency care is anticipated. Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Cold water may be used. Get medical attention if discomfort persists.

### Section 5 Firefighting measures

**Fire:** Flash point: > 230°F

**Special Fire Fighting Instructions:** Use water spray to cool fire exposed containers and structures. Do not direct solid water stream into burning molten material, thus causing splattering and spreading of the fire.

**Fire Extinguishing Media:** Powder, CO<sub>2</sub>, dry chemical, water spray, foam.

**Products of Combustion:** Small amounts of silicon oxides may be released.

**Special Information:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

### Section 6 Accidental release measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Prevent entry to sewers, basements, or confined areas; dike if needed.

Floors may be slippery and use care to avoid falling. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The Toll free number for the US Coast Guard National Response Center is (800) 424-8802.

### Section 7 Handling and storage

Never use pressure to empty containers. Protect against physical damage. Store in a cool, dry and well-ventilated location. Outside or detached storage is preferred. Separate

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from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Containers of this material are non-hazardous when empty.

## Section 8 Exposure controls/personal protection

**Airborne Exposure Limits:** Not normally needed. Ventilation is not normally required. If there is a large spill, wear an appropriate organic filter mask to reduce lung irritation.

**Skin Protection:** Not normally needed. Wear appropriate protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to minimize skin contact when handling large quantities.

**Eye Protection:** Not normally needed. Wear appropriate chemical safety glasses or goggles and/or a full face shield where splashing is possible.

## Section 9 Physical and chemical properties

**Appearance:** Clear  
Grey-Dark  
Grey liquid.

**Odor:** None.

**Solubility:** Soluble in water.

**Specific Gravity:** 1.30

**PH:** 12.5

**% Volatiles by volume @ 21°C (70°F):** Not available

**Boiling Point:** > 230°F.

**Melting Point:** No information found.

**Vapor Pressure:** N/A.

**Vapor Density:** N/A

## Section 10 Stability and Reactivity

**Stability:** Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:** Silicon oxides may form when burned.

**Hazardous Polymerization:** Will not occur.

**Incompatibilities:** Select water reactant metals.

**Conditions to Avoid:** N/A.

## Section 11 Toxicological information

**Toxicological Data:** This product may cause eye irritation. This product is non-hazardous under normal conditions of use. OSHA/HMIS has listed silicon dioxide as non-hazardous under normal conditions of use.

## Section 12 Ecological information

**Environmental Fate:** This product under normal dilution to drains, sewers, and treatment plants is not considered environmentally harmful.

**Environmental Toxicity:** This product under normal dilution to drains, sewers, and treatment plants is not considered environmentally harmful.

## Section 13 Disposal considerations

This product is considered a non-hazardous waste under RCRA, as supplied. Whatever

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cannot be saved for recovery or recycling should be handled as non-hazardous waste and can be sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## Section 14 Transport Information

### 14.1 Domestic (Land, D.O.T.)

**Proper Shipping Name:** Non-hazardous  
**Hazard Class:** Non-hazardous  
**UN/NA:** Non-hazardous  
**Packing Group:** N/A  
**Information reported for product/size:** 55 gal drum & 275 gal totes

### 14.2 International (I.M.D.G.)

Product is not regulated by IMDG.

### 14.3 International (Air, I.C.A.O.)

**Proper Shipping Name:** Non-hazardous  
**Hazard Class:** Non-hazardous  
**UN/NA:** N/A  
**Packing Group:** N/A  
**Information reported for product/size:** 55 Gallon drum

## Section 15 Regulatory information

Chemical Inventory Status - Part 1

Ingredients	CAS Number
WATER	7732-18-5
SILICIC ACID	7699-41-4

This product is regulated by the Environmental Protection Administration, under the U.S. Environmental Protection Act as a non-hazardous fertilizer. The MSDS is prepared to the OSHA Hazard Communication Standard, 29CFR 1910:1200

## Section 16 Other information

This information only concerns the above-mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

### i. Indication of changes

Date of printing August 7, 2023