



SG Crop Solutions

EcoSil

Mono-silicic Acid

NONPLANT FOOD INGREDIENT

Composition

18% (w/v) Mono-Silicic acid 82% water (inert ingredient)

Purpose

EcoSil is a beneficial supplement for plant/crops.

Directions for Application

Dilute product with water 1:500 to 1:5,000 (v/v) prior to use, Shake well.

Sugar cane: Apply at 1:1,000 at planting, 1:500 at days 60, 180, 270, post planting.

Rice: Apply at 1:1000 at planting and three times during the cycle with fertilizers.

Turf: Apply at 1:500, twice a month.

Vegetables & Fruits: Apply at 1:1,000 to 1:2,000 at planting, 1st leave formation, pre-flowering and one month before harvest.

Apply to seeds by immersion or spraying at 1:1,000 to 1:2,000.

Apply to soil through the irrigation system.

Storage

Avoid leaving open container as exposure to air crystallizes silicates.

Available packages

5 gallon jar, 55 gallon drum, 275 gallon tote.





CibuSil S

NONPLANT FOOD INGREDIENT

Composition

40% Mono-Silicic acid 60% Water (inert ingredient)

Purpose

Cibusil is a beneficial supplement for plants/crops.

Directions for Application

CibuSil S can be applied through the irrigation system. Dilute with water prior to use. Shake well.

Row Crops: Apply at 100-800ml/acre through the irrigation systems.

Apply at 3-8 leaf stage and again before flowering if required.

Vegetables: Apply at 100-800ml/acre through the irrigation systems.

Apply at 3-8 leaf stage and thereafter once monthly as required.

Fruit/Nut Tree Crops: Apply at 400-1,800ml/acre through irrigation systems.

Apply once during season as required.

Storage

Avoid leaving open container as exposure to air crystallizes silicates

Available packages

5 gallon jar, 55 gallon drum, 275 gallon tote.



CibuSil S

the silicon solution for crops

Description

CibuSil S is a liquid product containing a high amount of plant available silicon in the form of mono-silicic acid that is a beneficial element for crop production. CibuSil S, has a mono-silicic acid concentration of 40%.

Key functions of Si(OH)₄

- Enhances crop resistance towards drought stress (Hattori et al. 2005).
- Mediates crop tolerance to salt stress (Yeo et al., 1999).
- Plays a role in crop tolerance to metal toxicity such as aluminum in low pH soils (Lindsay, 1979).
- Promotes the growth, yield and quality of most crops (Liang et al., 2015).
- Improves the efficiency of fertilizer uptake and reduces the environmental impact of chemical use (Quinonez et al., 2020)

Directions for Use

- Can be applied to the soil or foliage. Dilute prior to use.
- Apply during key growth periods: planting, before flowering, after flowering, and post harvest.
- Foliar Spray: Apply 7-17 fl. oz. per acre.
- Drip Irrigation: Apply 17-35 fl. oz. per acre.

Mixing Instructions

- Add CibuSil S to water at a recommended rate, mix well.
- Apply within 4-8 hours.

Warnings

- Do not mix with acids as CibuSil S has a highly alkalinity.
- Do not mix with products that contain heavy metals.





SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier:

CibuSil S™

1.2 Relevant uses of the substance or mixture and uses advised against:

For use as a Horticultural/Agricultural/Forestry

1.3 Details of the supplier of the safety data sheet:

Shemin Garden LLC
2857 Calimyma Ave.
Clovis, CA 93611

Contact: Jim Li
Phone number: 559-696-3358
Email: mail@sgcropsolutions.com

1.4 Emergency phone number

Phone number: 1-800-222-122 (U.S. Poison Control)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLASSIFIED AS AN IRRITANT.

2.2 Label Elements

Contains: Mono silicic acid

2.3 Other Hazards

Extremely hazardous in case of skin or eye contact, ingestion or inhalation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Effective Adjuvant Component and hazardous components:

CAS No.	Significant Ingredients	% (optional)	OSHA PEL	ACGIH TLV
	Mono silicic acid (Si(OH) ₄)	~ 40 %	-	-
	Water	To 100 %		

4. FIRST AID MEASURES

4.1 Description of first aid measures

4.1.1 Inhalation

If symptomatic, move to fresh air. Get medical attention if symptoms persist.

4.1.2 Skin & Eye exposure

Any material that contacts the eye should be washed out immediately with water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention promptly if symptoms occur after washing. Wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

4.1.3 Ingestion

Obtain IMMEDIATE medical advice. DO not induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed

Prolonged contact with spray mist or vapours may produce chronic eye and skin irritation, respiratory tract irritation

4.3 Indication of any immediate medical attention and special treatment needed.

Information not available.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.



5.2 Special Hazards arising from the substance or mixture

Possible irritant vapours.

5.3 Advice for fire-fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate personal protective equipment.

Spill Clean-up Methods: Small spills: Dilute with water and mop up or absorb with an inert dry material and place in appropriate waste disposal container. Neutralize the residue with diluted a solution of acetic acid. Follow local and regional authority requirements. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Corrosive liquid. Stop leak if without risk. Absorb with Dry earth, sand or non-combustible material. Use water spray curtain to divert vapour drift. Neutralize the residue with diluted a solution. Flush area with water. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

Environmental Precautions: Avoid discharge into drains, water courses or onto the ground.

7. HANDLING AND STORAGE

Handling: Keep container dry. Do not breathe gas/fumes/vapour/spray. Never add water to product in case of insufficient ventilation. Use suitable respiratory equipment. Keep away from oxidizing agents and acids. .

Storage: Store away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Good general ventilation (typically 10 air changes per hour) 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.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Eye Protection: Risk of contact: Wear approved safety goggles.

Hand Protection: It is a good industrial hygiene practice to prevent skin contact. Use rubber gloves.

Skin Protection: Apron and long sleeves are recommended.

Hygiene Measures: 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.

Environmental Exposure Controls: Environmental manager must be informed of all major spillages.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance; Liquid, brown

Odour; Odourless

Melting point/freezing; no information specified

Initial boiling point and boiling range; No Information available

Flash point; No Information available

Evaporation rate; No Information available

Flammability (solid, gas); No Information available

Upper /lower flammability or explosive limits; No Information available

Density; 1.33 g/ml (19°C)

Solubility(ies); Soluble in water

pH: basic (>11)

Moisture content; 59%

Ash content: 94%

Decomposition temperature: No Information available

9.2 Other Information

No other relevant information available



10. STABILITY AND REACTIVITY

10.1 Reactivity

Stability: Stable.

Conditions to Avoid: Mixing with acids. May react with ammonium and zinc salts.

Incompatible Materials: Strong oxidizing agents & acids.

Hazardous Decomposition Products: No data available.

Possibility of Hazardous Reactions: No Information.

Corrosivity: Non-corrosive in presence of glass. Corrosive in presence of steel, aluminium, zinc and copper.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity: LD50 oral Rat 1300-2000 mg/kg.

Other toxic effects on humans: Extremely hazardous in case of skin contact, of ingestion, of inhalation.

Chronic Toxicity: No Information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available.

Mobility: No data available.

Persistence and Degradability: No data available.

Other Adverse Effects: No data available.

13. DISPOSAL CONSIDERATIONS

General Information: Do not discharge into drains, water courses or onto the ground. Discharge, treatment or disposal may be subject to national, state, or local laws. Empty containers may contain product residues.

Disposal Methods: No specific disposal method required.

Container: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

DOT Not regulated.

TDG Not regulated.

IATA Not regulated.

IMDG Not regulated.

Pack only in steel and/or plastic drums.

15. REGULATORY INFORMATION

15.1 WHIS: CLASS D-2B. **DSCL (EEC):** R35 – CAUSE SEVERE BURNS. **HMIS (USA):** HEALTH HAZARD 3.

15.2 Chemical Safety Assessment

CSA not undertaken for this substance.

16. OTHER INFORMATION

This Material Safety data sheet is compiled using data submitted for raw materials and practical experience. This product is intended for professional users only.

MSDS information:

To the best of our knowledge, the information contained herein is accurate and is based on the present state of our knowledge and does not therefore guarantee specific properties. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for any accuracy or completeness of the information contained herein.

Final determinations of suitability of any material are sole responsibility of the users, who must take responsibility for observing existing laws and regulations. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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