



Safety Data Sheet

SDS (formerly MSDS)

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufactured by: Green Eagle Technologies **Product name:** SILICATOR - Concentrate

Information contact: (928) 759- 3997 **Revision:** 12-2-2016

SECTION 2: COMPOSITION- INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS Number	PERCENT
Potassium Silicate Derivatives	10193-36-9	0.3 – 5
1,3-Propanediol	504-63-2	20 - 40
Mineral Acid	7647-01-0	1.0 – 5.0
Phosphoric Acid	7664-38-2	0.5 – 3.0
Water	7732-18-5	30 - 70

This product is exempt from registration under (FIFRA) the Federal Insecticide, Fungicide and Rodenticide Act

SECTION 3: HAZARD IDENTIFICATION



Health 1 Flammability 0 Reactivity 1

*HMIS: Minimal= 0, Slight= 1, Moderate= 2, Serious= 3, Severe= 4

Personal Protective Equipment (PPE):

- A = Safety glasses
- B = Safety glasses, gloves
- C = Safety glasses, gloves, chemical apron
- D = Face shield, gloves, chemical apron
- E = Safety glasses, gloves, dust respirator



FLAMMABILITY – 0
PHYSICAL HAZARD -2
REACTIVITY - 1

Potential acute health effects: The product and its components represent no known cumulative hazard to health or environment. The low pH of the product may represent an acidic burn hazard.

Potential chronic health effects: None Known

SECTION 4: FIRST AID MEASURES

Emergency and First Aid Procedures:

Primary Routes of Exposure: Inhalation Eye Contact Skin Contact Ingestion

Effects of Over-exposure:

Skin: Prolonged exposure may cause a skin sensitization in susceptible individuals. Low order of toxicity. The acidic character of this material may cause burns in the contacted areas.

Eyes: Immediately flush eyes with water. Get medical attention if irritation persists.

Ingestion: Ingestion should be avoided. Get medical attention if ill effects or discomfort persists.

Inhalation: Remove affected person from area of exposure.

SECTION 5: FIRE FIGHTING MEASURES

Product Data:

Flash point (°F):	Over 200°F, aqueous product
Flammability Limits in Air (% by Vol.):	Lower: Not established Upper: Not established
Auto-ignition Temperature:	Not Established, Aqueous solution, ≥ 250 F
Extinguishing Media for fires:	Carbon dioxide, dry powder, foam, water fog or mist. Water may be ineffective on flames, but should be used to keep fire exposed containers cool.

Special Fire Fighting Procedures:

Product will not burn or produce unusual chemical hazards upon exposure to heat, water or extinguishing media. Acidic material, avoid splashing or prolonged contact. Avoid contact with metals.

HMIS Rating:

Health: 1

*HMIS: Minimal= 0, Slight= 1, Moderate= 2, Serious= 3, Severe= 4

Personal Protective Equipment (PPE):

A = Safety glasses

B = Safety glasses, gloves

C = Safety glasses, gloves, chemical apron

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Personal Protective Equipment:

Fire fighters need self-contained respiratory equipment for fires in enclosed areas.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Procedure:

Contain, collect and reuse, if possible. Neutralize spill with sodium bicarbonate or equivalent, Absorb large spills with water-acid compatible sorbent material. Dispose of solid waste in a manner consistent with Federal, State and local waste regulations. Consult an expert on disposal of recovered material and ensure conformity to all disposal regulations.

Personal Protection:

Respiratory Protection: Approved NIOSH/MSHA (nuisance dust) respirator may be necessary under certain conditions where airborne contaminants may exceed exposure limits.

Eye Protection: Wear goggles or safety glasses with side shields at all times.

Other Protective Equipment: Impervious gloves, long sleeve pants and shirts, and protective head-wear should be worn to minimize exposure.

SECTION 7: HANDLING AND STORAGE

Storage Conditions:

The maximum recommended storage temperature for this product is 160°F. Store in a well ventilated area.

Handling Procedures:

Avoid ignition sources such as sparks and flame. Wear appropriate PPE when handling this product. No special precautionary health measures should be needed under anticipated conditions of storage or use. As a water based product, general incompatibility with

hydrocarbon oils are expected. As with all low pH (acidic) materials, avoid direct contact with metals. Store product at temperatures below 110 F.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limit Information:

The use of local exhaust ventilation is recommended to control process emissions near source. Provide mechanical ventilation in confined spaces.

Respiratory Information:

A respiratory protection program meeting OSHA 29 CFR & 1910-134 and ANSI Z88. Two requirements must be followed whenever work place conditions warrant a respirator's use.

Eye Protection:

Use Chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent). Eye protection worn must be compatible with respiratory protection system employed.

Hand Protection:

NOTE: Material may be a skin sensitizer in susceptible individuals. The gloves listed below may provide protection against direct contact. Gloves of other chemically resistant materials may not provide adequate protection:

- Butyl Rubber
- Nitrile

Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves after use. Wash hands with soap and water.

Other Protection:

Use a chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

Engineering Controls (Ventilation):

Use local exhaust ventilation with a minimum capture velocity of 150 ft. /min. (0.75 m/sec.) at the point of dust or mist evolution. Refer to the current edition of *Industrial Ventilation: A Manual of Recommended Practice*, published by the American Conference of Government Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Other Protective Equipment:

Facilities storing or utilizing this product should be equipped with an eyewash facility and safety showers.

The product may represent an acid burn hazard. Protective clothing should be used to prevent direct prolonged contact with the skin. Use PPE appropriate to the handling of dilute hydrochloric (muriatic) acid solutions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Water like	Water Solubility	miscible
Appearance:	Clear, Water White	Melting Point	N/A, aqueous liquid
Evaporation Rate:	Equal to water	pH: 0.5 – 0.9	Boiling Point: 212 F
Specific Gravity:	1.06 @ 77°F	Boiling Point >200°F	Melt Point <32 F
Critical Temp: N/A	Volatility: as Water	Odor: Mild-Oderless	Dispersion: Aqueous
Vapor Density: Water			

SECTION 10: STABILITY AND REACTIVITY

Stability: This product is considered stable. Hazardous polymerization will not occur.

Conditions to Avoid: Extreme temperatures, open flames and metal contact.

Materials to Avoid: Avoid mixing with catalysts, driers. Do not store in metal containers.

Hazardous Decomposition Products: None Known

Hazardous Polymerization Products: None Known

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Entry: Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Not listed on PAN database

Chronic Effects on Humans: Not listed on PAN database

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: None Listed on PAN database.

Special Remarks on Chronic Effects on Humans: Not listed on PAN database.

Special Remarks on other Toxic Effects on Humans: Not listed on PAN database.

Also refer to section three for information on potential health effects.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: None Listed.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

No specific ecological data are available for this product. Not listed on PAN database

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of this product in compliance with all applicable federal, state, and local regulations
Please refer to sections 5 and 6 for disposal and regulatory information.

SECTION 14: TRANSPORT INFORMATION

Department of Transportation (DOT) **DOT Shipping Name:** Not regulated

SECTION 15: REGULATORY INFORMATION

Chemical Inventory Lists

All products are listed on TSCA and DSL

SARA (311/312) Reportable Hazardous Categories NONE

Federal and State Regulations:

Other Regulations: Not available.

Other Classifications: WHMIS (Canada): Not controlled under WHMIS (Canada). DSCL (EEC): R36/38- Irritating to eyes and skin. HMIS (U.S.A.): p.5 Health Hazard: 1 Fire Hazard: 0 Reactivity: 1

Personal Protection: National Fire Protection Association (NFPA):

Health: 1 Flammability: 0 Reactivity: 1

Specific hazard: Acidic material may cause chemical burns with prolonged contact.

Protective Equipment: Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

SECTION 16: OTHER INFORMATION

The data presented here relates only to the product in use as designated and in relation to other materials.

References: N/A **Other Special Considerations:** N/A **Created:** 7/09/2012 **Last Updated:** 08/2/2016