Material Safety Data Sheet

Super SI

Section 1: Identification of the substance and the company

Product identifier: Super SI

Substance name: Ortho silicic acid (OSA) stabilized with polyethylene glycol (PEG)

CAS No.: 10193-36-9 (OSA) and 25322-68-3 (PEG) EC No.: 233-477-0 (OSA) and 500-038-2 (PEG) Synonyms: Stabilized monosilicic acid, silicasol

Chemical formula: H₄O₄Si

Application: Stimulates growth of vegetation

Contact information:



Section 2: Hazards identification

Product definition: mixture of substances.

Potential acute health effects:

Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion and of inhalation.

Potential chronic health effects: Carcinogenic effects: not available. Mutagenic effects: not available. Teratogenic effects: not available. Developmental toxicity: not available.

Repeated or prolonged exposure is not known to aggravate medical condition.

Section 3: Composition and information on ingredients

Main ingredients in composition:

Chemical name	Chemical formula	% weight
Ortho silicic acid	H ₄ O ₄ Si	0,8
Poly ethylene glycol	C _{2n} H _{4n+2} O _{n+1}	50



Toxicological data on ingredients:

LD50: Not available LC50: Not available

Section 4: First aid measures

Eye contact:

Check for and remove any contact lenses. In case of contact of substance with eyes, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if the irritation occurs.

Skin contact:

Rinse immediately and thoroughly with water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Inhalation:

If inhaled, make sure to breathe fresh air. If breathing is difficult, provide extra oxygen and get medical attention.

Ingestion:

Rinse mouth thoroughly. Do not induce vomiting, unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of the material are swallowed, contact a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 5: Firefighting measures

Flammability of the product: may be combustible at high temperature.

Auto-ignition temperature: not available.

Flash points: not available

Flammable limits: not available.

Products of combustion: not available.

Fire hazards in presence of various substances: slightly flammable in presence of open

flames.

Explosion hazards in presence of various substances:

Risks of explosion of the product in presence of mechanical impact: not available. Risks of explosion of the product in presence of static discharge: not available.

Firefighting media and instructions:

Small fire: use dry chemical powder.



Large fire: use water spray, fog or foam. Do not use water jet.

Section 6: Accidental release measures

Personal precautions:

Evacuate non-essential personnel, eliminate ignition sources and wear protective equipment. Shut off the source of the leakage only if safe to do so. Wear respiratory equipment. Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of the water according to local and regional authority requirements.

Large spill:

Evacuate unprotected personnel from the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface. Avoid runoff to ground water, surface waters and sewers.

Section 7: Handling and storage

Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

Storage:

Keep container tightly closed. Keep container in a cool area. Do not let sunlight come in contact with the substance.

Section 8: Exposure controls and personal protection

Engineering controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal protection:

Safety glasses, lab coat, vapour respirator and gloves. Be sure to use an approved/certified respirator or equivalent.

Personal protection in case of a large spill:



Splash goggles, full suit, vapour respirator, boots, gloves and a self-contained breathing apparatus should be used to avoid inhalation of the product.

Exposure limits:

Not available.

Section 9: Physical and chemical properties

Physical state and appearance: Clear & viscous liquid.

Odour: Odourless.

Taste: Sour.

Molecular Weight: Not available.

Colour: Colourless.

pH: 2-3.

Boiling Point: Not available. Melting Point: Not available.

Critical Temperature: Not available. Specific Gravity: 1.0825-1.1254 g/ml.

Vapour Pressure: Not available. Vapour Density: Not available.

Volatility: Not available.

Odour threshold: Not available. Water/oil dist. Coeff.: Not available. Ionicity (in water): Not available. Dispersion Properties: See solubility.

Solubility: Soluble in water.

Section 10: Stability and reactivity

Stability: The substance is stable.

Instability temperature: Not available.

Conditions of instability: Incompatible materials, excess heat.

Incompatibility with various substances: Not available.

Corrosivity: Not available. Polymerization: Not available.

Section 11: Toxicological information

Routes of entry: Absorbed through skin, eye contact, inhalation and ingestion.

Toxicity to animals: Not determined.

Chronic effects on humans: Not available.

Other toxic effects on humans: Slightly hazardous in case of skin contact (irritant,

permeator), of ingestion and of inhalation.



Special remarks on toxicity to animals: Not available.

Special remarks on chronic effects on humans: Not available. Special remarks on other toxic effects on humans: Not available.

Section 12: Ecological information

Eco toxicity: Not available. 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 less toxic

than the product itself.

Section 13: Disposal considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations. If uncontaminated, recover and reuse as product. If contaminated with other materials, the nature and extent of contamination may require use of specialized disposal methods.

Disposal Regulatory Requirements:

Consult local, county, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Regulatory information

There is no relevant national or regional regulatory information available.

Section 16: Other information

Created: 21-02-2015

Last updated: 31-08-2016