

MATERIAL SAFETY DATA SHEET

Complies with EC Directives EC 91/155/EEC & 93/112/EC

1. Chemical Product and Company Identification

- 1.1. Product Name: **KURIDYNE SP-S**
- 1.2. Company Information: **KURITA AMERICA, INC.**
1313 Valwood Pkwy., Suite 370
Carrollton, TX 75006 USA
- 1.3. Points of Contact: Telephone: 972-484-4438
FAX: 972-484-4445
Web: www.kuritaamerica.com
- 1.4. Emergency Information: CHEMTREC – 1-800-424-9300

2. Composition / Information on Ingredients

Powdered formulation based on Sulfamic acid

- 2.1. This product is composed of the following ingredients:
- (a) Sulfamic acid >60%
- (b)
- 2.2. Characterization of important components according to 2.1.:
- | COMPONENT | CAS-No. |
|-------------------|-----------|
| (a) Sulfamic acid | 5329-14-6 |
| (b) | |

3. Hazards Identification

Corrosive, may be fatal if swallowed. Harmful if inhaled. Causes severe skin and mucus membrane irritation.

HMIS CODES:

Health-2, Flamability-0, Reactivity-2, Hazard-Corrosive

4. First Aid Measures

- 4.1. Eye Contact : After separating the eyelids, flush with copious amounts of Water for at least 15 minutes. Contact an ophthalmologist immediately.
- 4.2. Skin Contact : Remove contaminated clothing, take a shower, thoroughly wash affected skin with water.
- 4.3. Ingestion : Rinse mouth with water, take two to three glasses of water and contact physician immediately.
- 4.4. Inhalation : Extremely damaging to mucous membranes and upper respiratory tract. Symptoms may include burning sensation, coughing, wheezing, shortness of breath and vomiting.
- 4.5. Notes to Physician : May cause pulmonary edema, a medical emergency. Pulmonary edema may be delayed up to 48 hours.

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5. Fire Fighting Measures

- 5.1. Flammability of the product : This product is not flammable
5.2. Suitable extinguishing media : Use any means suitable for extinguishing surrounding fire.
5.3. Special exposure hazards: During a fire or combustion of this product can generate toxic fumes.

6. Accidental Release Measures

Avoid generating dust by sweeping dry spills. Wear proper protective equipment. Contain spill and neutralize aqueous spills with soda ash or other alkali.

7. Handling and Storage

- 7.1. Handling : Keep container tightly closed. Avoid prolonged contact with skin or eyes, do not breath fumes and vapors.
7.2. Storage : Store in a cool, dry, well ventilated location. Keep container right side up and tightly closed when not in use.

8. Physical and Chemical Properties

- 8.1. Appearance : White to colorless granular powder
8.2. Odor : None
8.3. Physical State : Solid
8.4. pH Value : 1.18 (25°C) 1% aqueous solution
8.5. Vapor Pressure : No Data (30°C)
8.6. Vapor Density : 3.3 (Air = 1)
8.7. Boiling Point : No Data
8.8. Melting Point : 205°C
8.9. Solubility in Water : 100%
8.10. Specific Gravity : N/A (25°C)
8.11. Viscosity : No Data
8.12. Autoignition Temperature : N/A

9. Stability and Reactivity

- 9.1. Stability : Stable under ordinary conditions of use and storage
Solution is acidic.
9.2. Conditions to Avoid : Dust generation
9.3. Hazardous Decomposition : May emit ammonia, oxides of sulfur, oxides of Nitrogen, and oxides of carbon.

10. Toxicological Information

- 10.1. Eye – Extremely irritating/corrosive
10.2. Skin – Severely irritating after 4 hours exposure
10.3. Target Organs – Eyes, Nose, Throat and Lungs.
10.4. Carcinogenicity – Not known
10.5. Acute Effects – May cause irreversible tissue damage to eyes resulting in blindness.

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11. Ecological Information

11.1. Ecotoxicological Information:

- 11.1.1. Oral rat LD50 = 3160mg kg-1
- 11.1.2. Oral muskrat LD50 = 1312mg kg-1
- 11.1.3. Oral Guinea Pig LD50 = 1050mg kg-1

12. Disposal Considerations

An acceptable method of disposal is to dilute with a large amount of water and use an alkali to neutralize to a neutral pH followed by discharge into a suitable treatment system in accordance with all regulatory agencies.

13. Transport Information

13.1. DOT:

- 13.1.1. DOT – UN Number : 2967
- 13.1.2. DOT Shipping Name : Sulfamic acid, 60%
- 13.1.3. Hazard Class : 8 (Corrosive)
- 13.1.4. Subsidiary Risk (Class) : 8 (Corrosive)

13.2. IATA/ICAO:

- 13.2.1. Hazard Class : 8 (Corrosive)
- 13.2.2. Packing Group : III
- 13.2.3. Proper Shipping Name : Sulfamic acid, 60% powder
- 13.2.4. ID/UN Number : 2967
- 13.2.5. IATA Label : 8 (Corrosive)

13.3. IMO:

- 13.3.1. Hazard Class : 8 (Corrosive)
- 13.3.2. Packing Group : III

13.4. TDG (Canada):

- 13.4.1. Packing Group : III

14. Regulatory Information

SARA Title III Section 302 Extremely Hazardous Substances(40 CFR 355): Acute Y:Chronic N
Section 311 Hazard Category (40 CFR 370): Fire Hazard, Immediate (Acute) Health Hazard
Section 313 Reportable Ingredients (40 CFR 372): Not Listed
CERCLA Regulatory (40 CFR 302.4): Unlisted
Listed under TSCA – Toxic Substance Control Act, Listed on Canada DSL inventory list

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15. Other information

This MSDS was prepared in accordance with OSHA 29 CFR 1910.1200 and EC Directives EC 91/155/EEC & 93/112/EC.

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