

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 I-302**
- 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

Aqueous formulation based on Hydrogen Peroxide

- 2.1. This product is composed of the following ingredients:

- | | | |
|-----|-------------------|----------|
| (a) | Hydrogen Peroxide | 10 – 30% |
| (b) | Water | 70 – 90% |

- 2.2. Characterization of important components according to 2.1.:

- | | COMPONENT | CAS-No. |
|-----|-------------------|-----------|
| (a) | Hydrogen Peroxide | 7722-84-1 |
| (b) | Water | 7732-18-5 |

3. Hazards Identification

Oxidizer, Contact with combustibles may cause fire. Decomposes yielding oxygen that supports combustion or organic material and can cause overpressure if confined.

Corrosive to the eyes, nose, throat and lungs. May cause blindness if overexposed.

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 : Guide affected person to fresh air. Contact a physician in case inconvenience persists.
- 4.5. Notes to Physician : H₂O₂ at this concentration is a strong oxidant. Direct contact with the eye is likely to cause corneal damage especially if not washed immediately, the possibility of local corticosteroid therapy should be considered. There is a remote possibility of distension due to gas formation.

MATERIAL SAFETY DATA SHEET

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

5. Fire Fighting Measures

- 5.1. Flammability of the product : This product is not flammable
5.2. Suitable extinguishing media : Flood with water.
5.3. Special exposure hazards: During a fire or combustion of this product can generate oxygen and intensify surrounding fire.

6. Accidental Release Measures

Wear proper protective equipment. Contain spill and neutralize with Catalase enzyme or Sodium Sulfite. Combustible materials used in the cleanup should be rinsed well to avoid re-ignition.

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 : Clear Colorless Liquid
8.2. Odor : None
8.3. Physical State : Liquid
8.4. pH Value : 3.7 – 4.7 (25°C)
8.5. Vapor Pressure : 23 – 28mmHg (30°C)
8.6. Vapor Density : No Data
8.7. Boiling Point : 103 – 108°C
8.8. Melting Point : N/A
8.9. Solubility in Water : 100%
8.10. Specific Gravity : 1.09 – 1.13 (25°C)
8.11. Viscosity : No Data
8.12. Autoignition Temperature : N/A

9. Stability and Reactivity

- 9.1. Stability : Stable, heat or contamination may contribute to instability
9.2. Conditions to Avoid : Excessive heat or contamination
9.3. Materials to Avoid : Reducing agents, wood, paper, heavy metals.
9.4. Hazardous Decomposition : Oxygen (Supports combustion)

10. Toxicological Information

- 10.1. Eye – Extremely irritating/corrosive
10.2. Skin – Mildly 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.

MATERIAL SAFETY DATA SHEET

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

11. Ecological Information

11.1. Ecotoxicological Information:

- 11.1.1. Channel Catfish 96hour LC50 = 37.4ppm
- 11.1.2. Fathead minnow 96hour LC50 = 16.4ppm
- 11.1.3. Daphnia magna 24hour EC50 = 7.7ppm
- 11.1.4. Daphnia pulex 48hour LC50 = 2.4ppm
- 11.1.5. Freshwater snail 96hour LC50 17.7ppm

11.2. Chemical Fate Information:

Hydrogen Peroxide in the aquatic environment is subject to various reduction or oxidation processes and decomposes into water and oxygen. Hydrogen peroxide half-life in fresh water ranged from 8hours to 20days, in air from 10-20hours and in soil from minutes to hours depending on microbial activity and metal contaminants.

12. Disposal Considerations

- 12.1. An acceptable method of disposal is to dilute with a large amount of water and allow the hydrogen peroxide to decompose 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 : 2014
- 13.1.2. DOT Shipping Name : Hydrogen Peroxide, 10-30% aqueous
- 13.1.3. Hazard Class : 5.1 (Oxidizer)
- 13.1.4. Subsidiary Risk (Class) : 8 (Corrosive)

13.2. IATA/ICAO:

- 13.2.1. Hazard Class : 5.1 (Oxidizer)
- 13.2.2. Packing Group : II
- 13.2.3. Proper Shipping Name : Hydrogen Peroxide, 10-30% aqueous
- 13.2.4. ID/UN Number : 2014
- 13.2.5. IATA Label : 5.1 (Oxidizer)

13.3. IMO:

- 13.3.1. Hazard Class : 5.1 (Oxidizer)
- 13.3.2. Packing Group : II

13.4. TDG (Canada):

- 13.4.1. Packing Group : II

14. Regulatory Information

SARA Title III Section 302 Extremely Hazardous Substances (40 CFR 355): Not Listed
Section 311 Hazard Category (40 CFR 370): Fire Hazard, Immediate (Acute) Health Hazard
Section 312 Threshold Planning Quantity (40 CFR 370): 10,000lbs (conc. <52%)
Section 313 Reportable Ingredients (40 CFR 372): Not Listed
CERCLA Regulatory (40 CFR 302.4):Unlisted(H₂O₂ 20-40%);RQ=100lbs.; Ignitable, Corrosive
Listed under TSCA – Toxic Substance Control Act, Listed on Canada DSL inventory list

MATERIAL SAFETY DATA SHEET

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

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.

DISCLAIMER: The information contained in this MSDS is based on tests believed to be reliable. However, KURITA AMERICA, INC. does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of the usage may be required. KURITA AMERICA, INC. assumes no responsibility for the results obtained or for incidental or consequential damages, including lost profits arising from the use of this data. No warranty against the infringement of any patent, copyright or trademark is made or implied.