



## Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS)

### SECTION 1: Identification

#### 1.1. Product Identifier

**Trade Name or Designation:** Peroxyacetic Acid, 4.36% (w/w) in 24% (w/w) Hydrogen Peroxide

**Product Number:** 5495.4

**Other Identifying Product Numbers:** 5495.4-5HP

#### 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

#### 1.3. Details of the Supplier of the Safety Data Sheet

**Company:** Ricca Chemical Company

**Address:** 448 West Fork Drive

Arlington, TX 76012 USA

**Telephone:** 888-467-4222

#### 1.4. Emergency Telephone Number (24 hours)

CHEMTREC (USA) 800-424-9300

CHEMTREC (International) 1+ 703-527-3887

### SECTION 2: Hazard(s) Identification

#### 2.1. Classification of the Substance or Mixture

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

Hazard Class	Category	Hazard Statements	Precautionary Statements:
Acute Toxicity - Oral	Category 4	H302	P264, P270, P301+P312, P330, P501
Skin Corrosion / Irritation	Category 1	H314	P260, P264, P280, P301+P330+P331, P303+P361+P353, P363, P304+P340, P310, P321, P305+P351+P338, P405, P501
Eye Damage / Irritation	Category 1	H318	P280, P305+P351+P338, P310
Oxidizing Liquids	Category 2	H272	P210, P220, P221, P280, P370+P378, P501
Corrosive to Metals	Category 1	H290	P234, P390, P406
Hazardous to the Aquatic Environment (Acute)	Category 2	H401	P273, P501

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### 2.2. GHS Label Elements

Pictograms:



Signal Word: **Danger**

Hazard Statements:

Hazard Number	Hazard Statement
H272	May intensify fire; oxidizer.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H401	Toxic to aquatic life.

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### Precautionary Statements:

Precautionary Number	Precautionary Statement
P210	Keep away from heat, sparks and open flame. No smoking.
P220	Keep away from clothing and other combustible materials.
P221	Take any precaution to avoid mixing with combustibles.
P234	Keep only in original container.
P260	Do not breathe fumes, mist, vapors, or spray.
P264	Wash arms, hands and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or physician.
P321	Specific treatment (Wash areas of contact with water. If possible, wipe off areas of contact with dry cloth before flushing with water).
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use dry chemical, foam or carbon dioxide to extinguish.
P390	Absorb spillage to prevent material damage.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.
P501	Dispose of contents in accordance with local, state, federal and international regulations.

### 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

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## SECTION 3: Composition / Information on Ingredients

### 3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	Weight%
Water	H <sub>2</sub> O	18.01 g/mol	7732-18-5	66.85
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	34.01 g/mol	7722-84-1	23.73
Acetic Acid	CH <sub>3</sub> COOH	60.05 g/mol	64-19-7	4.93
Peroxyacetic Acid	CH <sub>3</sub> CO <sub>3</sub> H	76.05 g/mol	79-21-0	4.37
Sulfuric Acid	H <sub>2</sub> SO <sub>4</sub>	98.07 g/mol	7664-93-9	0.12

## SECTION 4: First-Aid Measures

### 4.1. General First Aid Information

**Eye Contact:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation, redness, pain, tearing and burns. Symptoms may include corneal ulceration and possible damage to vision.

**Inhalation:** IF INHALED: Remove person to fresh air and keep comfortable for breathing.

**Skin Contact:** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. May cause irritation, redness and pain. Corrosive destruction is possible. Exposure may bleach skin white.

**Ingestion:** IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Dilute with large amounts of water. Do not induce vomiting. Vomiting may cause further damage due to the corrosive nature of this product. Call a physician.

### 4.2. Most Important Symptoms and Effects, Acute and Delayed

Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Warning! Oxidizer. Corrosive. Avoid contact with skin, eyes, or clothing. If swallowed, do not induce vomiting. Give large quantity of water and call a physician. Wash areas of contact with plenty of water for 15 minutes. For eyes, get medical attention. EYE CONTACT: May cause irritation, redness, pain, tearing and burns. Symptoms may include corneal ulceration and possible damage to vision. SKIN CONTACT: May cause irritation, redness and pain. Corrosive destruction is possible. Exposure may bleach skin white.

### 4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water. If possible, wipe off areas of contact with dry cloth before flushing with water). Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. Observe for 48 hours for lung effects. Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops. Dilute with large amounts of water. Do not induce vomiting. Vomiting may cause further damage due to the corrosive nature of this product. Call a physician.



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### SECTION 5: Fire-Fighting Measures

#### 5.1. Extinguishing Media

In case of fire: Use dry chemical, foam or carbon dioxide to extinguish. Chemical extinguishing agents may accelerate decomposition. Use LARGE quantities of water as fog to fight FIRES in which this material is involved.

#### 5.2. Specific Hazards Arising from the Substance or Mixture

May intensify fire; oxidizer. A non-combustible liquid but a powerful oxidizer. Dangerous fire and explosion hazard when exposed to fire. Containers may explode in fire.

#### 5.3. Special Protective Equipment for Firefighters

Use protective clothing and breathing equipment appropriate for the surrounding fire.

### SECTION 6: Accidental Release Measures

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

#### 6.2. Cleanup and Containment Methods and Materials

Stop or control the leak, if this can be done without undue risk. Use water spray to cool and disperse vapors and protect personnel.

### SECTION 7: Handling and Storage

#### 7.1. Precautions for Safe Handling and Storage Conditions

Store in corrosive resistant container with a resistant inner liner. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Keep away from combustibles, ignition sources, organic materials, or other oxidizable substances. Refrigeration will slow down decomposition. Containers should be vented. Periodically check for bulging containers, which can burst from increased pressure.

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### SECTION 8: Exposure Controls / Personal Protection

#### 8.1 Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Acetic Acid (64-19-7)	TLV-TWA	USA	10 ppm TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Acetic Acid (64-19-7)	TLV-STEL	USA	15 ppm STEL	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)
Acetic Acid (64-19-7)	TWA	USA	10 ppm TWA; 25 mg/m <sup>3</sup> TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Sulfuric Acid (7664-93-9)	TWA	USA	1 mg/m <sup>3</sup> TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Sulfuric Acid (7664-93-9)	TLV-TWA	USA	0.2 mg/m <sup>3</sup> TWA (thoracic particulate matter)	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Hydrogen Peroxide (7722-84-1)	TLV-TWA	USA	1 ppm TWA	ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)
Hydrogen Peroxide (7722-84-1)	TWA	USA	1 ppm TWA; 1.4 mg/m <sup>3</sup> TWA	U.S. - OSHA - Final PELs - Time Weighted Averages (TWAs)
Peroxyacetic Acid (79-21-0)	TLV-STEL	USA	0.4 ppm STEL (inhalable fraction and vapor)	ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

#### 8.2. Exposure Controls

**Engineering Controls:** No specific controls are needed. Normal room ventilation is adequate.

**Respiratory Protection:** Normal room ventilation is adequate.

**Skin Protection:** Wear protective gloves and eye protection. Chemical resistant gloves.

**Eye Protection:** Wear protective gloves and eye protection. Safety glasses or goggles.

#### 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.



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### SECTION 9: Physical and Chemical Properties

#### 9.1. Basic Physical and Chemical Properties

**Appearance:** Colorless liquid

**Physical State:** Liquid

**Odor:** Data not available.

**Odor Threshold:** Data not available.

**pH:** Data not available.

**Melting/Freezing Point:** Data not available.

**Initial Boiling Point/Range:** Data not available.

**Flash Point:** Data not available.

**Evaporation Rate:** Data not available.

**Flammability:** Data not available.

**Flammability/Explosive Limits:** Data not available.

**Vapor Pressure:** Data not available.

**Vapor Density:** Data not available.

**Relative Density:** 1.2

**Solubility:** Miscible

**Partition Coefficient:** Data not available.

**Auto-Ignition Temperature:** Data not available.

**Decomposition Temperature:** Data not available.

**Viscosity:** Data not available.

**Explosive Properties:** Data not available.

**Oxidizing Properties:** Data not available.

### SECTION 10: Stability and Reactivity

#### 10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage. This solution gradually decomposes at room temperature, and more rapidly as the temperature increases, losing available oxygen.

#### 10.2. Possibility of Hazardous Reactions

Data not available.

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### 10.3. Conditions to Avoid and Incompatible Materials

Keep away from heat, sparks and open flame. No smoking. Keep away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Keep only in original container. Combustible materials, alkalis, alcohols, iodides, lime water, sulfites, permanganates, organic compounds (such as wood, oil), acids, metals.

### 10.4. Hazardous Decomposition Products

Will not occur.

## SECTION 11: Toxicological Information

### 11.1. Information on Toxicological Effects

#### Acute Toxicity - Oral Exposure:

Harmful if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. Dispose of contents in accordance with local, state, federal and international regulations.

#### Acute Toxicity - Dermal Exposure:

Not applicable.

#### Acute Toxicity - Inhalation Exposure:

Not applicable.

#### Acute Toxicity - Other Information:

(Peroxyacetic Acid) LD50, Oral, Rat: 1540 uL/kg; LD50, Inhalation, Rat: 450mg/m<sup>3</sup>; LD50, Dermal, Rabbit: 1410 uL/kg, details not reported other than lethal dose values. Peroxyacetic Acid is investigated as a tumorigen.

#### Skin Corrosion and Irritation:

Causes severe skin burns and eye damage. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water. If possible, wipe off areas of contact with dry cloth before flushing with water). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

#### Respiratory Sensitization:

Not applicable.

#### Skin Sensitization:

Not applicable.

#### Germ Cell Mutagenicity:

Not applicable.





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**Carcinogenicity:**

Not applicable.

**Reproductive Toxicity:**

Not applicable.

**Specific Target Organ Toxicity from Single Exposure:**

Not applicable.

**Specific Target Organ Toxicity from Repeated Exposure:**

Not applicable.

**Aspiration Hazard:**

Not applicable.

**Additional Toxicology Information:**

Data not available.

### SECTION 12: Ecological Information

**12.1. Ecotoxicity**

Toxic to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.

**12.2. Persistence and Degradability**

Data not available.

**12.3. Bioaccumulative Potential**

Data not available.

**12.4. Mobility in Soil**

Data not available.

**12.5. Other Adverse Ecological Effects**

Data not available.

### SECTION 13: Disposal Considerations

**13.1. Waste Treatment Methods**

Data not available.

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## SECTION 14: Transportation Information

### 14.1. Transportation by Land-Department of Transportation (DOT, United States of America)

**Sizes:** 20 L

**UN Number:** UN3149

**Proper Shipping Name:** Hydrogen peroxide and peroxyacetic acid mixtures, stabilized

**Hazard Class:** 5.1 (8)

**Packing Group:** II

**Hazard Label(s):**



### 14.2. Transportation by Air - International Air Transport Association (IATA)

**Sizes:** 20 L

**UN Number:** UN3149

**Proper Shipping Name:** Hydrogen peroxide and peroxyacetic acid mixture, stabilized

**Hazard Class:** 5.1 (8)

**Packing Group:** II

**Hazard Label(s):**



### 14.3 Transportation of Dangerous Goods (TDG, Canada)

**Sizes:** 20 L

**UN Number:** UN3149

**Proper Shipping Name:** HYDROGEN PEROXIDE AND PEROXYACETIC ACID MIXTURES, STABILIZED

**Hazard Class:** 5.1 (8)

**Packing Group:** II

**Hazard Label(s):**



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## SECTION 15: Regulatory Information

### 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

### 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Sulfuric Acid (CAS # 7664-93-9): 1000 lb EPCRA RQ

Sulfuric Acid (CAS # 7664-93-9): 1000 lb TPQ

Hydrogen Peroxide (CAS # 7722-84-1): 1000 lb EPCRA RQ (concentration >52%)

Hydrogen Peroxide (CAS # 7722-84-1): 1000 lb TPQ (concentration >52%)

Peroxyacetic Acid (CAS # 79-21-0): 500 lb EPCRA RQ

Peroxyacetic Acid (CAS # 79-21-0): 500 lb TPQ

### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Acetic Acid (CAS # 64-19-7): 5000 lb final RQ; 2270 kg final RQ

Sulfuric Acid (CAS # 7664-93-9): 1000 lb final RQ; 454 kg final RQ

### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Sulfuric Acid (CAS # 7664-93-9): 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

Peroxyacetic Acid (CAS # 79-21-0): 1.0 % de minimis concentration

### 15.5. Massachusetts Right-to-Know Substance List

Acetic Acid (CAS # 64-19-7): Present (including glacial)

Sulfuric Acid (CAS # 7664-93-9): Extraordinarily hazardous

Sulfuric Acid (CAS # 7664-93-9): Present

Hydrogen Peroxide (CAS # 7722-84-1): Extraordinarily hazardous

Peroxyacetic Acid (CAS # 79-21-0): Extraordinarily hazardous

### 15.6. Pennsylvania Right-to-Know Hazardous Substances

Acetic Acid (CAS # 64-19-7): Environmental hazard; Environmental hazard (water solutions)

Acetic Acid (CAS # 64-19-7): Present (including water solutions)

Sulfuric Acid (CAS # 7664-93-9): Environmental hazard

Sulfuric Acid (CAS # 7664-93-9): Environmental hazard (listed under Sulfuric acid)

Sulfuric Acid (CAS # 7664-93-9): Present

Sulfuric Acid (CAS # 7664-93-9): Present (listed under Sulfuric acid)

Hydrogen Peroxide (CAS # 7722-84-1): Environmental hazard (concentration >52%); Present

Hydrogen Peroxide (CAS # 7722-84-1): Present (concentration >52%)

Water (CAS # 7732-18-5): "Present" As Ethyl alcohol and water [RR-00802-6]

Water (CAS # 7732-18-5): Present

Peroxyacetic Acid (CAS # 79-21-0): Environmental hazard; Present (diluted with 60% of Acetic acid; regulated under Peracetic acid, listed under Peracetic acid)

Peroxyacetic Acid (CAS # 79-21-0): Present

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### 15.7. New Jersey Worker and Community Right-to-Know Components

- Acetic Acid (CAS # 64-19-7): corrosive
- Acetic Acid (CAS # 64-19-7): sn 0004
- Sulfuric Acid (CAS # 7664-93-9): carcinogen; corrosive; reactive - second degree
- Sulfuric Acid (CAS # 7664-93-9): sn 1761
- Sulfuric Acid (CAS # 7664-93-9): SN 1761 500 lb TPQ
- Sulfuric Acid (CAS # 7664-93-9): sn 1762
- Hydrogen Peroxide (CAS # 7722-84-1): corrosive; mutagen; reactive - third degree
- Hydrogen Peroxide (CAS # 7722-84-1): sn 1015
- Hydrogen Peroxide (CAS # 7722-84-1): SN 1015 500 lb TPQ (>52% concentration)
- Peroxyacetic Acid (CAS # 79-21-0): corrosive; reactive - fourth degree
- Peroxyacetic Acid (CAS # 79-21-0): sn 1482
- Peroxyacetic Acid (CAS # 79-21-0): SN 1482 500 lb TPQ

### 15.8. California Proposition 65

- Sulfuric Acid (CAS # 7664-93-9): "carcinogen, 3/14/2003" As Strong inorganic acid mists containing sulfuric acid [RR-03978-1]
- Sulfuric Acid (CAS # 7664-93-9): carcinogen, 3/14/2003

### 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

- Acetic Acid (CAS # 64-19-7): Present (DSL)
- Acetic Acid (CAS # 64-19-7): Present (NDSL)
- Sulfuric Acid (CAS # 7664-93-9): Present (DSL)
- Hydrogen Peroxide (CAS # 7722-84-1): Present (DSL)
- Water (CAS # 7732-18-5): Present (DSL)
- Peroxyacetic Acid (CAS # 79-21-0): Present (DSL)

### 15.10. United States of America Toxic Substances Control Act (TSCA) List

**All components of this solution are listed as active on the TSCA Inventory or are mixtures (hydrates) of active items listed on the TSCA Inventory.**

- Acetic Acid (CAS # 64-19-7): Present (ACTIVE)
- Sulfuric Acid (CAS # 7664-93-9): Present (ACTIVE)
- Hydrogen Peroxide (CAS # 7722-84-1): Present (ACTIVE)
- Water (CAS # 7732-18-5): Present (ACTIVE)
- Peroxyacetic Acid (CAS # 79-21-0): Present (ACTIVE)

### 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

- Acetic Acid (CAS # 64-19-7): 200-580-7
- Acetic Acid (CAS # 64-19-7): 273-079-4
- Sulfuric Acid (CAS # 7664-93-9): 231-639-5
- Hydrogen Peroxide (CAS # 7722-84-1): 231-765-0
- Water (CAS # 7732-18-5): 231-791-2
- Peroxyacetic Acid (CAS # 79-21-0): 201-186-8

# Safety Data Sheet

## SECTION 16: Other Information

### 16.1. Full Text of Hazard Statements and Precautionary Statements

May intensify fire; oxidizer. May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Toxic to aquatic life.

Keep away from heat, sparks and open flame. No smoking. Keep away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Keep only in original container. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves and eye protection.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water. If possible, wipe off areas of contact with dry cloth before flushing with water). Wash contaminated clothing before reuse. In case of fire: Use dry chemical, foam or carbon dioxide to extinguish. Absorb spillage to prevent material damage.

Store locked up. Store in corrosive resistant container with a resistant inner liner.

Dispose of contents in accordance with local, state, federal and international regulations.

### 16.2. Miscellaneous Hazard Classes

**Canadian Carcinogenicity Hazard Class:** Not Applicable.

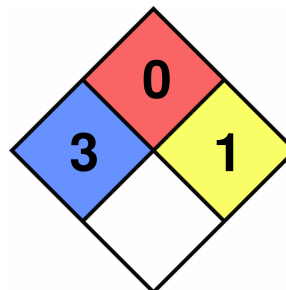
**Physical Hazards Not Otherwise Classified (PHNOC):** Not Applicable.

**Health Hazards Not Otherwise Classified (HHNOC):** Not Applicable.

**Biohazardous Infectious Materials Hazard Class:** Not Applicable.

### 16.3. National Fire Protection Association (NFPA) Rating

**Health:** 3  
**Flammability:** 0  
**Reactivity:** 1  
**Special Hazard:**



### 16.4. Document Revision

**Last Revision Date:** 2023-09-11

## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.