SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Congo Red TS

Product Number: 2253

Other Identifying Product Numbers: 2253-16, 2253-4

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 hr)

CHEMTREC (USA) 800-424-9300 CHEMTREC (International) 1+ 703-527-3887

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

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

| | Hazard | | | |
|---|------------|-----------|---|--|
| Hazard Class | Category | Statement | Precautionary Statements | |
| Germ Cell Mutagenicity | Category 1 | H340 | P201, P202, P280, P308+P313, P405, P501 | |
| Carcinogenicity | Category 1 | H350 | P201, P202, P280, P308+P313, P405, P501 | |
| Reproductive Toxicity | Category 1 | H360 | P201, P202, P280, P308+P313, P405, P501 | |
| Specific Target Organs/Systemic Toxicity Following Repeated | Category 1 | H372 | P260, P264, P270, P314, P501 | |
| Exposure | | | | |

2.2. GHS Label Elements

Pictograms:



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Signal Word: Danger

Hazard Statements:

| Hazard Number | Hazard Statement |
|---------------|---|
| H340 | May cause genetic defects. |
| H350 | May cause cancer. |
| H360 | May damage fertility or the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |

Precautionary Statements:

| Precautionary Number | Precautionary Statement |
|----------------------|---|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| 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. |
| P280 | Wear protective gloves and eye protection. |
| P308+P313 | IF exposed or concerned: Get medical attention. |
| P314 | Get medical attention if you feel unwell. |
| P405 | Store locked up. |
| P501 | Dispose of contents in accordance with local, state, federal and international regulations. |

2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

| Chemical Name | Formula | Molecular Weight | CAS Number | Weight% |
|-------------------|-----------------------------|------------------|-------------------|---------|
| Water | H₂O | 18.01 g/mol | 7732-18-5 | 91.15% |
| Ethyl Alcohol | CH₃CH₂OH | 46.06 g/mol | 64-17-5 | 7.54% |
| Congo Red | $C_{32}H_{22}N_6Na_2O_6S_2$ | 696.66 g/mol | 573-58-0 | 0.52% |
| Isopropyl Alcohol | CH₃CHOHCH₃ | 60.09 g/mol | 67-63-0 | 0.42% |
| Methyl Alcohol | CH₃OH | 32.04 g/mol | 67-56-1 | 0.38% |

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SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva.

Inhalation: Not expected to require first aid. If necessary, remove to fresh air.

Skin Contact: May result in drying and cracking, which can lead to secondary infections and dermatitis.

Ingestion: Dilute with water or milk. Call a physician if necessary.

4.2. Most Important Symptoms and Effects, Acute and Delayed

May cause irritation to the eyes. May be harmful if swallowed. If ingested, dilute with water and call a physician. Contact may result in allergic reaction. Wash areas of contact with plenty of water. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: May result in drying and cracking, which can lead to secondary infections and dermatitis.

4.3. Medical Attention or Special Treatment Needed

Not expected to require special treatment.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Water, dry chemical, foam, or carbon dioxide. Water spray may be used to keep fire-exposed containers cool.

5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

5.3. Special Protective Equipment for Firefighters

Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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

Remove all sources of ignition. Contain spill. Absorb in suitable material (vermiculite, dry sand, etc.) for disposal in a RCRA approved waste disposal facility. Ventilate area of spill. Do not flush to sewer.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage.

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SECTION 8: Exposure Controls / Personal Protection

8.1. Control Parameters

| Chemical Name | Limit Type | Country | Exposure Limit | Information Source |
|-----------------------------|------------|---------|----------------|--|
| Ethyl Alcohol (64-17-5) | TWA | USA | 1000 ppm TWA | U.S OSHA - Final PELs - Time |
| | | | 1900 mg/m³ TWA | Weighted Averages (TWAs) |
| Ethyl Alcohol (64-17-5) | TLV-STEL | USA | 1000 ppm STEL | ACGIH - Threshold Limit Values - Short |
| | | | | Term Exposure Limits (TLV-STEL) |
| Isopropyl Alcohol (67-63-0) | TWA | USA | 400 ppm TWA | U.S OSHA - Final PELs - Time |
| | | | 980 mg/m³ TWA | Weighted Averages (TWAs) |
| Isopropyl Alcohol (67-63-0) | TLV-STEL | USA | 400 ppm STEL | ACGIH - Threshold Limit Values - Short |
| | | | | Term Exposure Limits (TLV-STEL) |
| Isopropyl Alcohol (67-63-0) | TLV-TWA | USA | 200 ppm TWA | ACGIH - Threshold Limit Values - Time |
| | | | | Weighted Averages (TLV-TWA) |
| Methyl Alcohol (67-56-1) | TWA | USA | 200 ppm TWA | U.S OSHA - Final PELs - Time |
| | | | 260 mg/m³ TWA | Weighted Averages (TWAs) |
| Methyl Alcohol (67-56-1) | TLV-STEL | USA | 250 ppm STEL | ACGIH - Threshold Limit Values - Short |
| | | | | Term Exposure Limits (TLV-STEL) |
| Methyl Alcohol (67-56-1) | TLV-TWA | USA | 200 ppm TWA | ACGIH - Threshold Limit Values - Time |
| | | | | Weighted Averages (TLV-TWA) |

8.2. Exposure Controls

Engineering Controls: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne

Exposure Limit.

Respiratory Protection: Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic

vapor cartridge may be worn.

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. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may be worn. 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: Reddish-orange liquid

Physical State: Liquid

Odor: Data not available.

Odor Threshold: Data not available.

pH: 8 - 9.5

Melting/Freezing Point: Approximately 0°C

Initial Boiling Point /Range: Approximately 100°C - Approximately 100°C

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: 0.96

Solubility: Miscible

Partition Coefficient (n-Octanol/Water): Data not available.

Auto-Ignition Temperature: Data not available.

Decomposition Temperature: Data not available.

Viscosity: Data not available.

ExplosiveProperties: 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.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Oxidizers, platinum, Sodium, Potassium Dioxide, Bromine Pentafluoride, Acetyl Bromide, Acetyl Chloride.

10.4. Hazardous Decomposition Products

Will not occur.

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not applicable.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

LD50, Oral, Rat: (Congo Red) 15,200 mg/kg, (Methanol) 5628 mg/kg, details of toxic effects not reported other than lethal dose value; (Ethanol) 7060 mg/kg, respiration changes noted.

Skin Corrosion and Irritation:

Not applicable.

Serious Eye Damage and Irritation:

Not applicable.

Respiratory Sensitization:

Not applicable.

Skin Sensitization:

Not applicable.

Germ Cell Mutagenicity:

May cause genetic defects. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Carcinogenicity:

May cause cancer. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Reproductive Toxicity:

May damage fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific Target Organ Toxicity from Single Exposure:

Not applicable.

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Specific Target Organ Toxicity from Repeated Exposure:

Causes damage to organs through prolonged or repeated exposure. 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. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Not applicable.

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.

SECTION 14: Transportation Information

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

Not regulated according to DOT Regulations.

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Not regulated according to IATA Regulations.

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 Not listed.
- 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals Methyl Alcohol (CAS # 67-56-1): 5000 lb final RQ; 2270 kg final RQ
- 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

 Methyl Alcohol (CAS # 67-56-1): 1.0 % de minimis concentration

Isopropyl Alcohol (CAS # 67-63-0): 1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

15.5. Massachusetts Right-to-Know Substance List

Ethyl Alcohol (CAS # 64-17-5): Teratogen Methyl Alcohol (CAS # 67-56-1): Present Isopropyl Alcohol (CAS # 67-63-0): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances

Ethyl Alcohol (CAS # 64-17-5): Present

Methyl Alcohol (CAS # 67-56-1): Environmental hazard

Methyl Alcohol (CAS # 67-56-1): Present

Isopropyl Alcohol (CAS # 67-63-0): Environmental hazard

Isopropyl Alcohol (CAS # 67-63-0): Present

Isopropyl Alcohol (CAS # 67-63-0): Special hazardous substance

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

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

Ethyl Alcohol (CAS # 64-17-5): carcinogen; flammable - third degree; mutagen; teratogen

Ethyl Alcohol (CAS # 64-17-5): sn 0844

Methyl Alcohol (CAS # 67-56-1): flammable - third degree; teratogen

Methyl Alcohol (CAS # 67-56-1): sn 1222

Methyl Alcohol (CAS # 67-56-1): SN 1222 500 lb TPQ

Isopropyl Alcohol (CAS # 67-63-0): flammable - third degree

Isopropyl Alcohol (CAS # 67-63-0): sn 1076

Isopropyl Alcohol (CAS # 67-63-0): SN 1076 500 lb TPQ (manufacturing - strong acid process only)

15.8. California Proposition 65

Congo Red (CAS # 573-58-0): carcinogen, 10/1/1992

Ethyl Alcohol (CAS # 64-17-5): carcinogen, 4/29/2011 (in alcoholic beverages)

Ethyl Alcohol (CAS # 64-17-5): carcinogen, 7/1/1988 (when associated with alcohol abuse)

Ethyl Alcohol (CAS # 64-17-5): developmental toxicity, 10/1/1987 (in alcoholic beverages)

Methyl Alcohol (CAS # 67-56-1): developmental toxicity, 3/16/2012

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

Congo Red (CAS # 573-58-0): Present (DSL)

Ethyl Alcohol (CAS # 64-17-5): Present (DSL)

Ethyl Alcohol (CAS # 64-17-5): Present (NDSL)

Methyl Alcohol (CAS # 67-56-1): Present (DSL)

Methyl Alcohol (CAS # 67-56-1): Present (NDSL)

Isopropyl Alcohol (CAS # 67-63-0): Present (DSL)

Isopropyl Alcohol (CAS # 67-63-0): Present (NDSL)

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

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

Congo Red (CAS # 573-58-0): Present [S]

Ethyl Alcohol (CAS # 64-17-5): Present

Methyl Alcohol (CAS # 67-56-1): Present

Isopropyl Alcohol (CAS # 67-63-0): Present

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

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

Not listed.

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SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

May cause genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Wear protective gloves and eye protection.

IF exposed or concerned: Get medical attention. Get medical attention if you feel unwell.

Store locked up.

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

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

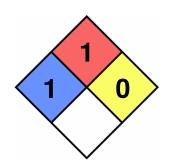
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

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

Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

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



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16.4. Document Revision

Last Revision Date: 5/1/2015

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.

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