SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Eriochrome Black T, 2% (w/v) in 40% Triethanolamine/60% Methanol

Product Number: R2899100
Other Identifying Product Numbers: R2899100-1C

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

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RICCA CHEMICAL COMPANY®

Safety Data Sheet

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
Acute Toxicity - Oral	Category 3	H301	P264, P270, P301+P310, P321, P330, P405, P501
Acute Toxicity - Dermal	Category 3	H311	P280, P302+P352, P312, P321, P361, P405, P501
Acute Toxicity - Inhalation	Category 3	H331	P261, P271, P304+P340, P311, P321, P403+P233, P405, P501
Skin Corrosion / Irritation	Category 2	H315	P264, P280, P302+P352, P321, P332+P313, P362
Eye Damage / Irritation	Category 2A	H319	P264, P280, P305+P351+P338, P337+P313
Skin Sensitizer	Category 1	H317	P261, P272, P280, P302+P352, P332+P313, P321, P363, P501
Reproductive Toxicity	Category 1	H360	P201, P202, P280, P308+P313, P405, P501
Specific Target Organs/Systemic Toxicity Following Single Exposure	Category 1	H370	P260, P264, P270, P307+P311, P321, P405, P501
Specific Target Organs/Systemic Toxicity Following Repeated Exposure	Category 1	H372	P260, P264, P270, P314, P501
Flammable Liquids	Category 3	H226	P210, P233, P240, P241, P242, P243, P280, P303+P361+P353, P370+P378, P403+P235, P50

2.2. GHS Label Elements

Pictograms:









Signal Word: Danger

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Hazard Statements:

Hazard Number	Hazard Statement
H226	Flammable liquid and vapor.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H360	May damage fertility or the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.

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Precautionary Number Precautionary Statement P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat, sparks and open flame. No smoking. P233 Keep container tightly closed. P240 Ground container and receiving equipment. P241 Use explosion-proof equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge.
P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat, sparks and open flame. No smoking. P233 Keep container tightly closed. P240 Ground container and receiving equipment. P241 Use explosion-proof equipment. P242 Use only non-sparking tools.
P210 Keep away from heat, sparks and open flame. No smoking. P233 Keep container tightly closed. P240 Ground container and receiving equipment. P241 Use explosion-proof equipment. P242 Use only non-sparking tools.
P233 Keep container tightly closed. P240 Ground container and receiving equipment. P241 Use explosion-proof equipment. P242 Use only non-sparking tools.
P240 Ground container and receiving equipment. P241 Use explosion-proof equipment. P242 Use only non-sparking tools.
P241 Use explosion-proof equipment. P242 Use only non-sparking tools.
P242 Use only non-sparking tools.
· · · ·
P2/13 Take precautionary measures against static discharge
i 240 I are prevautionary measures against static distribute.
P260 Do not breathe dust, fumes or mist.
P261 Avoid breathing dust, fumes or mist.
P264 Wash arms, hands and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves and eye protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or physician.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
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 ea
Continue rinsing.
P307+P311 IF exposed: Call a POISON CENTER or physician.
P308+P313 IF exposed or concerned: Get medical attention.
P311 Call a POISON CENTER or physician.
P312 Call a POISON CENTER or physician if you feel unwell.
P314 Get medical attention if you feel unwell.
P321 Specific treatment (Wash areas of contact with water).
P330 Rinse mouth.
P332+P313 If skin irritation occurs: Get medical attention.
P337+P313 If eye irritation persists: Get medical attention.
P361 Take off immediately all contaminated clothing and wash it before reuse.
P362 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents in accordance with local, state, federal and international regulations.

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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%
Methyl Alcohol	CH₃OH	32.04 g/mol	67-56-1	50.12%
Triethanolamine	$C_6H_{15}NO_3$	149.18 g/mol	102-71-6	47.76%
Eriochrome Black T	$C_{20}H_{12}N_3NaO_7S$	461.37 g/mol	1787-61-7	2.12%

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 with burning and stinging with possible damage to the cornea and conjunctiva.

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 and dermatitis.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or physician. Do not induce vomiting. Give large quantity of water. Call a

physician immediately.

4.2. Most Important Symptoms and Effects, Acute and Delayed

WARNING! Flammable liquid. Avoid contact with skin, eyes, or clothing. Wash areas of contact with plenty of water. For eyes, get medical attention. If ingested, dilute immediately with water or milk, induce vomiting, and call a physician. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: May cause irritation and dermatitis. CHRONIC EFFECTS / CARCINOGENICITY: Repeated ingestion of Triethanolamine has caused liver and kidney damage in animals.

4.3. Medical Attention or Special Treatment Needed

Specific treatment (Wash areas of contact with water).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Carbon dioxide, dry chemical powder, alcohol foam, polymer foam, halons, water spray Water or ordinary type foam may cause frothing.

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5.2. Specific Hazards Arising from the Substance or Mixture

Flammable liquid and vapor. Vapors may explode if ignited in an enclosed area.

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

Ground container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Remove all sources of ignition. Contain spill. Do not flush to sewer. Absorb with suitable inert material (vermiculite, dry sand, etc) and place in a chemical waste container for proper disposal in an approved waste disposal facility. Ventilate area of spill. Have extinguishing agent available in case of fire. Use non-sparking tools and equipment. Dispose of in accordance with local regulations.

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. Store in secure, flammable storage area away from all sources of ignition. Empty containers may be hazardous since they retain product residues.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Methyl Alcohol (67-56-1)	TWA	USA	200 ppm TWA	U.S OSHA - Final PELs - Time Weighted
			260 mg/m ³ TWA	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)
Triethanolamine (102-71-6)	TLV-TWA	USA	5 mg/m³ TWA	ACGIH - Threshold Limit Values - Time
				Weighted Averages (TLV-TWA)

8.2. Exposure Controls

Engineering Controls: Use only outdoors or in a well-ventilated area. A system of local and/or general exhaust is recommended to keep

employee exposures below the Airborne Exposure Limit.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved

atmosphere supplied respirator must be worn.

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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. If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved atmosphere supplied respirator must be worn. Chemical resistant gloves. Safety glasses or goggles.

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Dark blue 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: Approximately 22°C

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: 0.94

Solubility: Data not available.

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.

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10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Keep away from heat, sparks and open flame. No smoking. Keep container tightly closed. Strong oxidizing agents, Copper, copper alloys, galvanized iron, and acids.

10.4. Hazardous Decomposition Products

Will not occur.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Toxic if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Rinse mouth. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Acute Toxicity - Dermal Exposure:

Toxic in contact with skin. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Specific treatment (Wash areas of contact with water). Take off immediately all contaminated clothing and wash it before reuse. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Acute Toxicity - Inhalation Exposure:

Toxic if inhaled. Avoid breathing dust, fumes or mist. Use only outdoors or in a well-ventilated area. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Acute Toxicity - Other Information:

LD50, Oral, Rat: (Methanol) 5628 mg/kg, details of toxic effects not reported other than lethal dose value; (Eriochrome Black T) 17590 mg/kg, behavioral and gastrointestinal effects noted; (Triethanolamine) 4.92 mL/kg, eye, gastrointestinal and hair effects noted. LD50, Dermal, Rat: (Triethanolamine) >16 mL/kg, details of toxic effects not reported other than lethal dose value.

Skin Corrosion and Irritation:

Causes skin irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

Serious Eye Damage and Irritation:

Causes serious eye irritation. Wash arms, hands and face thoroughly after handling. 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. If eye irritation persists: Get medical attention.

Respiratory Sensitization:

Not applicable.

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Skin Sensitization:

May cause an allergic skin reaction. Avoid breathing dust, fumes or mist. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. Specific treatment (Wash areas of contact with water). Wash contaminated clothing before reuse. Dispose of contents in accordance with local, state, federal and international regulations.

Germ Cell Mutagenicity:

Not applicable.

Carcinogenicity:

Not applicable.

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:

Causes damage to organs. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific Target Organ Toxicity from Repeated Exposure:

Causes damage to organs through prolonged or repeated exposure. Do not breathe dust, fumes or mist. 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.

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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)

Sizes: 1L

UN Number: UN2924

Proper Shipping Name: Flammable Liquid, Corrosive, n.o.s. (Methanol, Triethanolamine)

Hazard Class: 3 (8)

Packing Group:

Hazard Placard Labels:





Sizes:

UN Number:

Proper Shipping Name:

Hazard Class:

Packing Group:

Hazard Placard Labels:

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

Sizes: 1L

UN Number: UN2924

Proper Shipping Name: Flammable Liquid, Corrosive, n.o.s. (Methanol, Triethanolamine)

Hazard Class: 3 (8)

Packing Group:

Hazard Placard Labels:





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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

 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

15.5. Massachusetts Right-to-Know Substance List

Triethanolamine (CAS # 102-71-6): Present Methyl Alcohol (CAS # 67-56-1): Present

15.6. Pennsylvania Right-to-Know Hazardous Substances

Triethanolamine (CAS # 102-71-6): Present Methyl Alcohol (CAS # 67-56-1): Environmental hazard Methyl Alcohol (CAS # 67-56-1): Present

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

Triethanolamine (CAS # 102-71-6): sn 4094

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

15.8. California Proposition 65

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

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

Triethanolamine (CAS # 102-71-6): Present (DSL)
Eriochrome Black T (CAS # 1787-61-7): Present (DSL)
Methyl Alcohol (CAS # 67-56-1): Present (DSL)
Methyl Alcohol (CAS # 67-56-1): Present (NDSL)

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

Triethanolamine (CAS # 102-71-6): Present Eriochrome Black T (CAS # 1787-61-7): Present Methyl Alcohol (CAS # 67-56-1): Present

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15.11. European Inventory of Existing Commercial Chemical Substances (EINECS),

European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

Flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic if inhaled. May damage fertility or the unborn child. Causes damage to organs. 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. Keep away from heat, sparks and open flame. No smoking. Ground container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust, fumes or mist. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye protection.

IF SWALLOWED: Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. 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. IF exposed: Call a POISON CENTER or physician. Get medical attention if you feel unwell. Specific treatment (Wash areas of contact with water). Rinse mouth. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use dry chemical, foam or carbon dioxide to extinguish.

Store in a well-ventilated place. Keep container tightly closed.

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.

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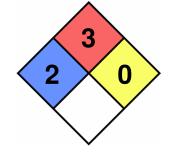
16.3. National Fire Protection Association (NFPA) Rating

Health: 2

Flammability: 3

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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