RICCA CHEMICAL COMPANY®

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation Water Hardness Indicator, 0.5% (w/v) Eriochrome Black T in 2-Methoxyethanol

Product Number 9300

Other Identifying Product Numbers 9300-16, 9300-32, 9300-4

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 412 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

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

Hazard Class	Category	Hazard Statements	Precautionary Statements
Acute Toxicity - Dermal	Category 4	H312	P280,P302+P352,P312,P321,P362+P364, P501
Acute Toxicity - Inhalation (Vapors)	Category 3	H331	P261,P271,P304+P340,P311, P321,P403+P233,P405,P501
Flammable Liquids	Category 3	H226	P210,P233,P240,P241,P242,P243, P280,P303+P361+P353,P370+P378, P403+P235,P501
Reproductive Toxicity	Category 1B	H360	P201,P202,P280,P308+P313,P405, P501
Specific Target Organ Toxicity - Repeated Exposure	Category 1	H372	P260,P264,P270,P314,P501

2.2. GHS Label Elements

Pictograms:

Signal Word: **Danger**

Hazard Statements:

NOTE: Hazard statements may be combined on labels to improve clarity and readability.

Hazard Number	Hazard Statement
H226	Flammable liquid and vapor
H312	Harmful in contact with skin
H331	Toxic if inhaled
H360	May damage fertility or the unborn child
H372	Causes damage to blood, central nervous system through prolonged or repeated exposure

Precautionary Statements:

NOTE: Precautionary statements may be combined or consolidated on labels to improve clarity and readability.

Prevention

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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharge.
P260	Do not breathe fumes or mist.
P264	Wash hands, arms, 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.
P280	Wear protective gloves and eye protection.

Response

Precautionary Number	Precautionary Statement
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	If exposed or concerned: Get medical advice or attention.
P311	Call a poison center or doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use dry chemical, foam, or carbon dioxide to extinguish.

Storage

Precautionary Number	Precautionary Statement
P403+P233+P235	Store in a well-ventilated place. Keep container tightly closed. Keep cool.
P405	Store locked up.

Disposal

Precautionary Number	Precautionary Statement
P501	Dispose of contents/container to suitable waste stream in accordance with local, state, federal, and international regulations.

2.3. Hazards not Otherwise Classified

No other hazards identified.

2.4. Ingredients of Unknown Acute Toxicity

This product does not contain any ingredients of unknown acute toxicity.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
2-methoxyethanol	Ethylene Glycol Monomethyl Ether; methyl cellosolve; EGMME	109-86-4	99.48
sodium 3-hydroxy-4-[(1-hydroxynaphthalen-2-yl)diazenyl]-7-nitronaphthalene-1-sulfonate	Eriochrome Black T; C.I. Mordant Black 11, monosodium salt	1787-61-7	0.52

SECTION 4: First-Aid Measures

4.1. Description of Necessary Measures

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

Ingestion: Dilute immediately with water or milk. Induce vomiting. Call a physician.

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 or shower. May cause irritation, redness, and pain.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Toxic if inhaled WARNING! Flammable liquid. May be harmful if swallowed. Keep away from heat, sparks, and open flames. If ingested, dilute immediately with water or milk, induce vomiting and call a physician. Avoid contact with skin, eyes, or clothing. Wash areas of contact with plenty of water. For eyes, get medical attention. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: May cause irritation, redness, and pain.

4.3. Immediate Medical Attention or Special Treatment Needed

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. If breathing is difficult, give oxygen. Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops. Dilute immediately with water or milk. Induce vomiting. Call a physician.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

In case of fire: Use dry chemical, foam, or carbon dioxide to extinguish. Dry chemical, alcohol foam, polymer foam, carbon dioxide, water spray, fog

5.2. Specific Hazards Arising from the Substance or Mixture in a Fire

Flammable liquid and vapor Moderate explosion hazard and dangerous fire hazard when exposed to heat, sparks and open flames. Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Sensitive to static discharge.

5.3. Special Protective Equipment and Precautions 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 and bond container and receiving equipment. Use explosion-proof equipment. Use non-sparking tools. Take action to prevent 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 in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Empty containers may be hazardous since they retain product residues. Store at room temperature.

SECTION 8: Exposure Controls / Personal Protection

8.1. Exposure Limits

U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)

Chemical Name	CAS Number	Exposure Limit
Ethylene Glycol Monomethyl Ether	109-86-4	25 ppm TWA; 80 mg/m3 TWA

U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

No limits found.

U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)

No limits found.

U.S. OSHA - Specifically Regulated Chemicals

No limits found.

ACGIH - Threshold Limit Values - Ceilings (TLV-C)

No limits found.

ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

No limits found.

ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

Chemical Name	CAS Number	Exposure Limit
Ethylene Glycol Monomethyl Ether	109-86-4	0.1 ppm TWA

8.2. 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.

8.3. Individual Protective Measures and Personal Protective Equipment

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: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State:	liquid
Color:	Dark purple
Odor:	mild ether-like
Odor Threshold:	Data not available.
Melting/Freezing Point:	-85°C
Boiling Point/Range:	123 - 126°C at 1013 hPa
Flammability:	Data not available.
Flammability/Explosive Limits:	14%
Flash Point:	39 °C
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Data not available.
pH:	Data not available.
Kinematic Viscosity:	Data not available.
Solubility:	soluble
Vapor Pressure:	8.1 hPa at 20°C
Evaporation Rate:	1 (butyl acetate = 1)
Relative Density:	0.97
Relative Vapor Density:	2.62
Particle Characteristics:	Data not available.
Partition Coefficient n-octanol/water, log	-0.85

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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Strong oxidizing agents such as Potassium Permanganate, Chromium Trioxide, Sodium Peroxide, Nitrates, Chlorates, and Perchlorates, heat, sparks and open flame.

10.4. Hazardous Decomposition Products

Will not occur.

Safety Data Sheet

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Oral acute toxicity estimate (ATE): 2382 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Ethylene Glycol Monomethyl Ether	109-86-4	Oral LD50 Rat 2370 mg/kg (Source: JAPAN_GHS)
Eriochrome Black T	1787-61-7	Oral LD50 Rat 17590 mg/kg (Source: NLM_CIP)

Acute Toxicity - Dermal Exposure:

Dermal acute toxicity estimate (ATE): 1286 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Ethylene Glycol Monomethyl Ether	109-86-4	Dermal LD50 Rabbit 1280 mg/kg (Source: NLM_CIP)
Eriochrome Black T	1787-61-7	Dermal LD50 Rabbit >3000 mg/kg (Source: IUCLID)

Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, vapor): 6.1319 mg/L, 4 h(calculated)

Chemical Name	CAS Number	Toxicity
Ethylene Glycol Monomethyl Ether	109-86-4	Inhalation LC50 Mouse 6.1 mg/L 4 h (vapor, Source: Canada_WHMIS)
Eriochrome Black T	1787-61-7	Inhalation LC50 Rat >2 mg/L 4 h (Source: NLM_CIP)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
	No data found.	

National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
	No data found.	

U.S. OSHA specifically regulated carcinogens

Chemical Name	CAS Number	Classification
	No data found.	

11.3 Additional Toxicology Information:

Harmful in contact with skin. Toxic if inhaled. May damage fertility or the unborn child. Causes damage to blood, central nervous system through prolonged or repeated exposure.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
Eriochrome Black T	1787-61-7	Earthworm	Acute	LC0 14 Days Eisenia foetida <12.3 mg/kg [soil dry weight] (IUCLID); LC100 14 Days Eisenia foetida >1000 mg/kg [soil dry weight] (IUCLID); LC50 14 Days Eisenia foetida >1000 mg/kg [soil dry weight] (IUCLID)
Eriochrome Black T	1787-61-7	Earthworm	Chronic	NOEC 14 Days Eisenia foetida <12.3 mg/kg [soil dry weight] (IUCLID)
Eriochrome Black T	1787-61-7	Freshwater Algae	Acute	EC50 72 h Desmodesmus subspicatus 0.094 mg/L (IUCLID)
Ethylene Glycol Monomethyl Ether	109-86-4	Freshwater Fish	Acute	LC50 96 h Lepomis macrochirus 10000 mg/L [static] (EPA); LC50 96 h Lepomis macrochirus 9650 mg/L [static] (IUCLID); LC50 96 h Oncorhynchus mykiss 16000 mg/L [static] (IUCLID)
Eriochrome Black T	1787-61-7	Freshwater Fish	Acute	LC50 96 h Brachydanio rerio 12.3 mg/L [static] (IUCLID); LC50 96 h Oncorhynchus mykiss 7.3 mg/L [static] (IUCLID); LC50 96 h Pimephales promelas 6 mg/L [static] (EPA)
Eriochrome Black T	1787-61-7	Water Flea	Acute	EC50 48 h Daphnia magna 41.3 mg/L (IUCLID)
Ethylene Glycol Monomethyl Ether	109-86-4	Water Flea	Chronic	NOEC 21 d Daphnia magna >500 mg/L [flow-through] (reproduction, ECHA_API)

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.

Safety Data Sheet

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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: 1 L, 120 mL, 500 mL

UN Number: UN1188

Proper Shipping Name: Ethylene Glycol Monomethyl Ether Solution

Hazard Class: 3

Packing Group: III

Hazard Label(s):

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

Sizes: 1 L, 120 mL, 500 mL

UN Number: UN1188

Proper Shipping Name: Ethylene Glycol Monomethyl Ether Solution

Hazard Class: 3

Packing Group: III

Hazard Label(s):

14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 1 L, 120 mL, 500 mL

UN Number: UN1188

Proper Shipping Name: ETHYLENE GLYCOL MONOMETHYL ETHER SOLUTION

Hazard Class: 3

Packing Group: III

Hazard Label(s):

SECTION 15: Regulatory Information

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

15.01. Occupational Safety and Health Administration (OSHA) Hazards

Chemical Name	CAS Number	Regulatory Information
		No data found.

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

Chemical Name	CAS Number	RQ
		No data found.

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

Chemical Name	CAS Number	Regulatory Information
		No data found.

15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

Chemical Name	CAS Number	List	Regulatory Information
Ethylene Glycol Monomethyl Ether	109-86-4	Emission Reporting	1.0 % de minimis concentration

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Ethylene Glycol Monomethyl Ether	109-86-4	Teratogen

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Ethylene Glycol Monomethyl Ether	109-86-4	Environmental hazard

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

Chemical Name	CAS Number	Regulatory Information
Ethylene Glycol Monomethyl Ether	109-86-4	sn 1211

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
Ethylene Glycol Monomethyl Ether	109-86-4	developmental toxicity, 1/1/1989
Ethylene Glycol Monomethyl Ether	109-86-4	male reproductive toxicity, 1/1/89

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

Chemical Name	CAS Number	List	Status
Ethylene Glycol Monomethyl Ether	109-86-4	DSL	Present
Eriochrome Black T	1787-61-7	DSL	Present

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

Chemical Name	CAS Number	Status
Ethylene Glycol Monomethyl Ether	109-86-4	Present [S] (ACTIVE)
Eriochrome Black T	1787-61-7	Present (ACTIVE)

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

Chemical Name	CAS Number	List	Number
Ethylene Glycol Monomethyl Ether	109-86-4	EINECS	203-713-7
Eriochrome Black T	1787-61-7	EINECS	217-250-3

15.12. China - Inventory of Existing chemical Substances (IECSC)

Chemical Name	CAS Number	Status
Ethylene Glycol Monomethyl Ether	109-86-4	Present [20626]
Eriochrome Black T	1787-61-7	Present [26613]

15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

Chemical Name	CAS Number	List	Status
Ethylene Glycol Monomethyl Ether	109-86-4	Annex 1	Present [KE-23272]
Eriochrome Black T	1787-61-7	Annex 1	Present [KE-31496]

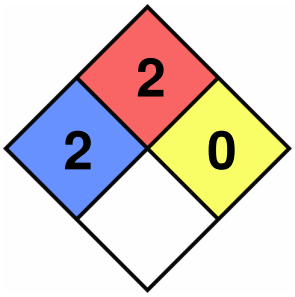
15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Ethylene Glycol Monomethyl Ether	109-86-4	(2)-405
Eriochrome Black T	1787-61-7	(5)-2113

SECTION 16: Other Information

16.1 National Fire Protection Associate (NFPA) Rating

Health: 2
Flammability: 2
Reactivity 0
Special Hazard:



16.2 Document Revision

Last Revision Date:
2026-05-25

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.