



Be Right™

# SAFETY DATA SHEET

Revision Date  
05-Aug-2020

Version 2.1

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## 1. IDENTIFICATION

### Product identifier

**Product Name** Eriochrome Black T (C.I. 14645)

### Other means of identification

**Product Code(s)** 13224

**Safety data sheet number** M00741

**UN/ID no** UN3077

### Recommended use of the chemical and restrictions on use

**Recommended Use** Laboratory reagent. Indicator for Magnesium. Indicator for calcium.

**Uses advised against** None.

**Restrictions on use** None.

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Hach Company P.O.Box 389 Loveland, CO 80539 USA +1(970) 669-3050

#### **Emergency telephone number**

+1(303) 623-5716 - 24 Hour Service

## 2. HAZARDS IDENTIFICATION

### Classification

#### **Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Vapors)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

#### **Hazards not otherwise classified (HNOC)**

Not applicable

#### **Label elements**

##### **Signal word**

Warning



**Hazard statements**

H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H332 - Harmful if inhaled  
H335 - May cause respiratory irritation

**Precautionary statements**

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P332 + P313 - If skin irritation occurs: Get medical attention  
P362 - Take off contaminated clothing and wash before reuse  
P280 - Wear protective gloves, protective clothing, eye protection, and face protection  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P337 + P313 - If eye irritation persists: Get medical attention  
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P271 - Use only outdoors or in a well-ventilated area  
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed  
P405 - Store locked up  
P501 - Dispose of contents/ container to an approved waste disposal plant

**Other Hazards Known**

May be harmful in contact with skin  
Toxic to aquatic life with long lasting effects

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance**

**Chemical Name** Eriochrome Black T (C.I. 14645)  
**Chemical Family** Indicators.  
**Formula** C<sub>20</sub>H<sub>12</sub>N<sub>3</sub>O<sub>7</sub>SNa  
**CAS No** 1787-61-7

Percent ranges are used where confidential product information is applicable.

Chemical name	CAS No.	Percent Range	HMRIC #
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt	1787-61-7	100%	-

**4. FIRST AID MEASURES**

**Description of first aid measures**

**General advice** No hazards which require special first aid measures. Use first aid treatment according to the nature of the injury.  
**Inhalation** Remove to fresh air.  
**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

**Skin contact** Wash skin with soap and water.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See Section 11 for additional Toxicological Information.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Caution: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical** No information available.

**Hazardous combustion products** Sodium oxides. Nitrogen oxides. Carbon monoxide, Carbon dioxide.

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

**U.S. Notice** Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Flammability class** Not applicable

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hand Protection** Wear suitable gloves.

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** No special protective equipment required.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.

**Thermal hazards** None under normal processing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	powder	Solid	<b>Color</b>	purple black
<b>Appearance</b>			<b>Odor threshold</b>	No data available
<b>Odor</b>	Odorless			

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Molecular weight</b>	461.40 g/mole	
<b>pH</b>	4	1% Solution
<b>Melting point/freezing point</b>	> 300 °C / 572 °F	

<b>Boiling point / boiling range</b>	No data available	
<b>Evaporation rate</b>	Not applicable	
<b>Vapor pressure</b>	Not applicable	
<b>Vapor density (air = 1)</b>	Not applicable	
<b>Specific gravity (water = 1 / air = 1)</b>	1.66	
<b>Partition Coefficient (n-octanol/water)</b>	log K <sub>ow</sub> = 3.07	
<b>Soil Organic Carbon-Water Partition Coefficient</b>	log K <sub>oc</sub> = 3.58	Estimation through KOCWIN v2.00 part of the Estimation Programs Interface (EPI) Suite™
<b>Autoignition temperature</b>	220 °C / 428 °F	
<b>Decomposition temperature</b>	No data available	
<b>Dynamic viscosity</b>	Not applicable	
<b>Kinematic viscosity</b>	Not applicable	

**Solubility(ies)**

**Water solubility**

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Soluble	2930 mg/L	20 °C / 68 °F

**Solubility in other solvents**

<u>Chemical Name</u>	<u>Solubility classification</u>	<u>Solubility</u>	<u>Solubility Temperature</u>
Concentrated Sulfuric Acid	Soluble	> 1000 mg/L	25 °C / 77 °F
Sodium hydroxide	Soluble	> 1000 mg/L	25 °C / 77 °F

**Other Information**

**Metal Corrosivity**

<b>Steel Corrosion Rate</b>	Not applicable
<b>Aluminum Corrosion Rate</b>	Not applicable

**Volatile Organic Compounds (VOC) Content**

This Product is by Weight 100% an Individual Pure Chemical Substance

<b>Chemical name</b>	<b>CAS No.</b>	<b>Volatile organic compounds (VOC) content</b>	<b>CAA (Clean Air Act)</b>
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt	1787-61-7	No data available	-

**Explosive properties**

<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available

**Flammable properties**

Flash point Not applicable

**Flammability Limit in Air**

Upper flammability limit No data available

Lower flammability limit No data available

**Oxidizing properties**

No data available.

**Bulk density**

No data available

## 10. STABILITY AND REACTIVITY

**Reactivity**

Not applicable.

**Chemical stability**

Stable under normal conditions.

**Explosion data**

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous polymerization**

None under normal processing.

**Conditions to avoid**

None known based on information supplied.

**Incompatible materials**

Strong oxidizing agents, strong acids, and strong bases.

**Hazardous Decomposition Products**

Nitrogen oxides. Sodium oxides. Carbon dioxide. Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

**Information on Likely Routes of Exposure**

**Product Information**

Inhalation No known effect based on information supplied.

Eye contact No known effect based on information supplied.

Skin contact No known effect based on information supplied.

Ingestion No known effect based on information supplied.

Symptoms No information available.

**Acute toxicity**

Based on available data, the classification criteria are not met

**Product Acute Toxicity Data**

No data available.

**Ingredient Acute Toxicity Data**

No data available.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt (100%) CAS#: 1787-61-7	Rat LD <sub>50</sub>	17590 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt (100%) CAS#: 1787-61-7	Rabbit LD <sub>50</sub>	> 3000 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt (100%) CAS#: 1787-61-7	Rat LC <sub>50</sub>	> 2 mg/L	4 hours	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)

**Acute Toxicity Estimations (ATE)**

Not applicable

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATE<sub>mix</sub> (oral)</b>	No information available
<b>ATE<sub>mix</sub> (dermal)</b>	No information available
<b>ATE<sub>mix</sub> (inhalation-dust/mist)</b>	No information available
<b>ATE<sub>mix</sub> (inhalation-vapor)</b>	No information available
<b>ATE<sub>mix</sub> (inhalation-gas)</b>	No information available

**Skin corrosion/irritation**

Based on available data, the classification criteria are not met.

**Product Skin Corrosion/Irritation Data**

No data available.

**Ingredient Skin Corrosion/Irritation Data**

No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
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1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt (100%) CAS#: 1787-61-7	Standard Draize Test	Rabbit	None reported	None reported	Skin irritant	IUCLID (The International Uniform Chemical Information Database)
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**Serious eye damage/irritation**

Based on available data, the classification criteria are not met.

**Product Serious Eye Damage/Eye Irritation Data**

No data available.

**Ingredient Eye Damage/Eye Irritation Data**

No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt (100%) CAS#: 1787-61-7	Standard Draize Test	Rabbit	None reported	None reported	Eye irritant	IUCLID (The International Uniform Chemical Information Database)

**Respiratory or skin sensitization**

Based on available data, the classification criteria are not met.

**Product Sensitization Data**

No data available.

**Ingredient Sensitization Data**

No data available.

Chemical name	Test method	Species	Results	Key literature references and sources for data
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt (100%) CAS#: 1787-61-7	OECD Test No. 406: Skin Sensitization	Guinea pig	Not confirmed to be a skin sensitizer	IUCLID (The International Uniform Chemical Information Database)

**STOT - single exposure**

Based on available data, the classification criteria are not met.

**Product Specific Target Organ Toxicity Single Exposure Data**

No data available.

**Ingredient Specific Target Organ Toxicity Single Exposure Data**

No data available.

**STOT - repeated exposure**

Based on available data, the classification criteria are not met.

**Product Specific Target Organ Toxicity Repeat Dose Data**



No data available.

**Ingredient Specific Target Organ Toxicity Repeat Exposure Data**

No data available.

**Carcinogenicity**

Based on available data, the classification criteria are not met.

**Product Carcinogenicity Data**

No data available.

**Ingredient Carcinogenicity Data**

No data available.

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt	1787-61-7	-	-	-	-

**Legend**

<b>ACGIH (American Conference of Governmental Industrial Hygienists)</b>	Does not apply
<b>IARC (International Agency for Research on Cancer)</b>	Does not apply
<b>NTP (National Toxicology Program)</b>	Does not apply
<b>OSHA (Occupational Safety and Health Administration of the US Department of Labor)</b>	Does not apply

**Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

**Product Germ Cell Mutagenicity invitro Data**

No data available.

**Ingredient Germ Cell Mutagenicity invitro Data**

No data available.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt (100%) CAS#: 1787-61-7	Mutation in microorganisms	<i>Salmonella typhimurium</i>	0.02 mg/plate	None reported	Positive test result for mutagenicity	IUCLID (The International Uniform Chemical Information Database)

**Product Germ Cell Mutagenicity invivo Data**

No data available.

**Ingredient Germ Cell Mutagenicity invivo Data**

No data available.

**Reproductive toxicity**

Based on available data, the classification criteria are not met.

**Product Reproductive Toxicity Data**

No data available.

**Ingredient Reproductive Toxicity Data**

No data available.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Based on available data, the classification criteria are not met.

**Unknown aquatic toxicity**

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

**Product Ecological Data**

**Aquatic Acute Toxicity**

No data available.

**Aquatic Chronic Toxicity**

No data available.

**Ingredient Ecological Data**

**Aquatic Acute Toxicity**

No data available.

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt (100%) CAS#: 1787-61-7	96 hours	<i>Pimephales promelas</i>	LC <sub>50</sub>	6 mg/L	IUCLID (The International Uniform Chemical Information Database)
Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
1-Naphthalenesulfonic acid, 3-hydroxy-4-[(1-hydroxy-2-naphthalenyl)azo]-7-nitro-, monosodium salt (100%) CAS#: 1787-61-7	48 Hours	<i>Daphnia magna</i>	EC <sub>50</sub>	41.3 mg/L	IUCLID (The International Uniform Chemical Information Database)

**Aquatic Chronic Toxicity**

No data available.

**Persistence and degradability**

**Product Biodegradability Data**

No data available.

**Bioaccumulation**

**Product Bioaccumulation Data**

No data available.

Partition Coefficient (n-octanol/water)

log K<sub>ow</sub> = 3.07

**Mobility**

Soil Organic Carbon-Water Partition Coefficient

log K<sub>oc</sub> = 3.58

**Other adverse effects**

Endocrine-disrupting potential.

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Do not reuse empty containers.

Special instructions for disposal

Check with national, local municipal and state authorities and waste contractors for pertinent local information on the disposal of this article.

**14. TRANSPORT INFORMATION**

**DOT**

UN/ID no UN3077  
Proper shipping name Environmentally hazardous substances, solid, n.o.s.  
DOT Technical Name Contains C.I. Mordant Black 11  
Hazard Class 9  
Packing Group III  
Emergency Response Guide Number 171

**TDG**

UN/ID no UN3077  
Proper shipping name Environmentally hazardous substances, solid, n.o.s.  
TDG Technical Name Contains C.I. Mordant Black 11  
Hazard Class 9  
Packing Group III

**IATA**

UN/ID no UN3077  
Proper shipping name Environmentally hazardous substances, solid, n.o.s.  
IATA Technical Name Contains C.I. Mordant Black 11  
Hazard Class 9  
Packing Group III  
ERG Code 171

**IMDG**

UN/ID no UN3077  
Proper shipping name Environmentally hazardous substances, solid, n.o.s.  
IMDG Technical Name Contains C.I. Mordant Black 11  
Hazard Class 9  
Packing Group III  
Marine pollutant This material meets the definition of a marine pollutant

**Note:** No special precautions necessary.

#### Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

## 15. REGULATORY INFORMATION

### National Inventories

TSCA Complies  
DSL/NDSL Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

### International Inventories

EINECS/ELINCS Complies  
ENCS Complies  
IECSC Complies  
Existing substances Complies  
PICCS Complies  
TCSI Complies  
AICS Complies  
NZIoC Complies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations.

**U.S. EPA Label Information**

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

**Special Comments**

None

**Additional information**

**Global Automotive Declarable Substance List (GADSL)**

Not applicable

**NFPA and HMIS Classifications**

<b>NFPA</b>	Health hazards - 0	Flammability - 0	Instability - 0	Physical and chemical properties -
<b>HMIS</b>	Health hazards - 0	Flammability - 0	Physical hazards - 0	Personal protection - X

**Key or legend to abbreviations and acronyms used in the safety data sheet**

NIOSH IDLH	<i>Immediately Dangerous to Life or Health</i>
ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
NDF	<i>no data</i>

**Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
MAC	Maximum Allowable Concentration	Ceiling	Ceiling Limit Value
X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

**Prepared By** Hach Product Compliance Department

**Revision Date** 05-Aug-2020

**Revision Note** None

**Disclaimer**

**USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site**

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**Product Name** Eriochrome Black T (C.I. 14645)  
**Version** 2.1

safety programs in accordance with applicable hazard communication standards and regulations.

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**End of Safety Data Sheet**