Printing date 10/06/2023 Reviewed on 10/06/2023

1 Identification

· Product identifier

· Trade name: Eriocchrome Black T 0.5% w/v in Ethanol

· Article number: ND306A

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225 DEER PARK, TX 77536 USA 800-256-2586

· Information department:

Technical Coordinator

Sherman Nelson shermann@aquasolutions.org

· Emergency telephone number: Chemtrec: 800-424-9300 Canutec: 613-996-6666



2 Hazard(s) identification

· Classification of the substance or mixture



GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carcinogenicity 2

H351 Suspected of causing cancer.

Specific Target Organ Toxicity - Repeated Exposure 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms







GHS02

GHS07

GHS08

- · Signal word Danger
- $\cdot \textit{Hazard-determining components of labeling:}$

Hydroxylamine Hydrochloride

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Trade name: Eriocchrome Black T 0.5% w/v in Ethanol

(Contd. of page 1)

· Hazard statements

Highly flammable liquid and vapor.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 3

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 1 *Fire* = 3

Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous comp	Dangerous components:		
CAS: 64-17-5	Ethyl Alcohol, Absolute 200 Proof	95.0%	
CAS: 5470-11-1	Hydroxylamine Hydrochloride	4.5%	
	(Q . 1	2)	

(Contd. on page 3)

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Trade name: Eriocchrome Black T 0.5% w/v in Ethanol

(Contd. of page 2)

· Table of Nonhazardous Ingredients

CAS: 1787-61-7 Eriochrome Black T

0.5%

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture
- During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

(Contd. on page 4)

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Trade name: Eriocchrome Black T 0.5% w/v in Ethanol

· Protective Action Criteria for Chemicals		
· PAC-1:		
CAS: 64-17-5	Ethyl Alcohol, Absolute 200 Proof	1,800 ppm
CAS: 5470-11-1	Hydroxylamine Hydrochloride	$0.42 \ mg/m^3$
· PAC-2:		
CAS: 64-17-5	Ethyl Alcohol, Absolute 200 Proof	3300* ppm
CAS: 5470-11-1	Hydroxylamine Hydrochloride	$4.7 \ mg/m^3$
· PAC-3:		
CAS: 64-17-5	Ethyl Alcohol, Absolute 200 Proof	15000* ppm
CAS: 5470-11-1	Hydroxylamine Hydrochloride	28 mg/m³

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

	······ · · · · · · · · · · · · · · ·		
CA	CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof		
PE	L Long-term value: 1900 mg/m³, 1000 ppm		
RE	Long-term value: 1900 mg/m³, 1000 ppm		
TL	Short-term value: 1000 ppm		
	A3		

· Additional information: The lists that were valid during the creation were used as basis.

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Trade name: Eriocchrome Black T 0.5% w/v in Ethanol

(Contd. of page 4)

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Liquid
Color: Red
Odor: Alcohol

· Odor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/Melting range: -114 °C (-173.2 °F)
Boiling point/Boiling range: 78.3 °C (172.9 °F)

• Flash point: $13 \, ^{\circ}C \, (55.4 \, ^{\circ}F)$

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Trade name: Eriocchrome Black T 0.5% w/v in Ethanol

	(Contd. of page
· Flammability (solid, gaseous):	Highly flammable.
· Auto igniting:	425 °C (797 °F)
· Decomposition temperature:	Not determined.
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vape mixtures are possible.
· Explosion limits:	
Lower:	3.5 Vol %
Upper:	19 Vol %
· Vapor pressure at 20 °C (68 °F):	59 hPa (44.3 mm Hg)
· Vapor pressure at 50 °C (122 °F):	280 hPa (210 mm Hg)
· Density at 20 °C (68 °F):	0.82902 g/cm³ (6.91817 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water at 20 °C (68 °F):	1,000 g/l
· Partition coefficient (n-octanol/wate	r): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	95.0 %
VOC content:	95.00 %
	787.6 g/l / 6.57 lb/gal
Solids content:	100.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- $\cdot \textit{Reactivity No further relevant information available}.$
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

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Trade name: Eriocchrome Black T 0.5% w/v in Ethanol

(Contd. of page 6)

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

 Oral
 LD50
 2,222 mg/kg

 Dermal
 LD50
 24,444 mg/kg

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

1

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 8)

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Trade name: Eriocchrome Black T 0.5% w/v in Ethanol

(Contd. of page 7)

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information	
· UN-Number · DOT, IMDG, IATA	UN1993
· UN proper shipping name · DOT · IMDG, IATA	Flammable liquids, n.o.s. (Ethanol) FLAMMABLE LIQUID, N.O.S. (Ethanol)
· Transport hazard class(es)	
· DOT	
· Class · Label	3 Flammable liquids 3
· IMDG, IATA	
· Class · Label	3 Flammable liquids 3
· Packing group · DOT, IMDG, IATA	II
· Environmental hazards:	Not applicable.
 Special precautions for user Hazard identification number (Kemler code): EMS Number: Stowage Category Segregation Code 	Warning: Flammable liquids 40 F-A,S-G B SG72 See 7.2.6.3.2.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT · Quantity limitations	On passenger aircraft/rail: 15 kg On cargo aircraft only: 50 kg
· IMDG · Limited quantities (LQ)	1 kg

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Trade name: Eriocchrome Black T 0.5% w/v in Ethanol

	(Contd. of page 8)
· Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN ''Model Regulation'':	UN 1993 FLAMMABLE LIQUID, N.O.S. (ETHANOL), 3, II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Sara

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

Ethyl Alcohol, Absolute 200 Proof	ACTIVE
Hydroxylamine Hydrochloride	ACTIVE
Eriochrome Black T	ACTIVE

· Hazardous Air Pollutants

None of the ingredients is listed.

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value)

CAS: 64-17-5 Ethyl Alcohol, Absolute 200 Proof

A3

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

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Trade name: Eriocchrome Black T 0.5% w/v in Ethanol

(Contd. of page 9)

· Hazard pictograms







GHS02

GHS07

· Signal word Danger

· Hazard-determining components of labeling:

Hydroxylamine Hydrochloride

· Hazard statements

Highly flammable liquid and vapor.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Get medical advice/attention if you feel unwell.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

In case of fire: Use CO2, powder or water spray to extinguish.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environment protection department.
- · Contact:

Date of Preparation / Last Revision:

· Date of preparation / last revision

Revision 0.0, 10-06-2023: creation date for SDS CMC 10/06/2023

· Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation IATA: International Air Transport Association

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Trade name: Eriocchrome Black T 0.5% w/v in Ethanol

(Contd. of page 10)

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flammable Liquids 2: Flammable liquids – Category 2 Sensitization - Skin 1: Skin sensitisation - Category 1 Carcinogenicity 2: Carcinogenicity – Category 2

Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) - Category 2