according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

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1 Identification

· Product identifier

· Trade name: Chromotropic Acid Solution

· Product code: CA1459SS

· Recommended use and restriction on use

· Recommended use: Laboratory chemicals

Restrictions on use: No relevant information available.

Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

AquaPhoenix Scientific, Inc.

860 Gitts Run Road

Hanover, PA 17331 USA

Tel +1 (717)632-1291

Toll-Free: (866)632-1291

info@aquaphoenixsci.com

· Distributor:

AquaPhoenix Scientific

860 Gitts Run Road,

Hanover, PA 17331

(717) 632-1291

· Emergency telephone number:

ChemTel Inc.

(800)255-3924 (North America)

+1 (813)248-0585 (International)

2 Hazard(s) identification

· Classification of the substance or mixture

Met. Corr.1 H290 May be corrosive to metals.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements

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

· Hazard pictograms:



GHS05

· Signal word: Warning

· Hazard statements:

H290 May be corrosive to metals.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements:

P234 Keep only in original container. P264 Wash thoroughly after handling.

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(Cont'd. of page 1) Wear protective gloves and eye protection.

P280 P302+P352 If on skin: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse. P337+P313 If eye irritation persists: Get medical advice/attention.

Absorb spillage to prevent material damage. P390

Store in corrosive resistant container with a resistant inner liner. P406

Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Components:			
7732-18-5	Water	85%	
5808-22-0	2,7-naphthalenedisulfonic acid, 4,5-dihydroxy-, disodium salt, dihydrate	1%	
	Sulfuric acid	14%	
	♦ Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318		

Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

- Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Immediately rinse with water.

If skin irritation continues, consult a doctor.

· After eye contact:

Protect unharmed eye.

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· Most important symptoms and effects, both acute and delayed:

Irritant to skin and mucous membranes.

Causes serious eye irritation.

Gastric or intestinal disorders when ingested.

Causes skin irritation.

- **Danger:** No relevant information available.
- Indication of any immediate medical attention and special treatment needed:

If medical advice is needed, have product container or label at hand.

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5 Fire-fighting measures

- Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · For safety reasons unsuitable extinguishing agents: No relevant information available.
- Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

- Advice for firefighters
- Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Methods and material for containment and cleaning up

Use limestone to neutralize and/or absorb spill.

Send for recovery or disposal in suitable receptacles.

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.

7 Handling and storage

- Handling
- Precautions for safe handling:

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Unsuitable material for receptacle: aluminium.

Unsuitable material for receptacle: steel.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Do not store together with alkalis (caustic solutions).

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

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Keep containers tightly sealed.

Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

- · 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.

7664-93-9 Sulfuric acid		
PEL (USA)	Long-term value: 1 mg/m³	
REL (USA)	Long-term value: 1 mg/m³	
TLV (USA)	Long-term value: 0.2* mg/m³ *as thoracic fraction	
EL (Canada)	Long-term value: 0.2 mg/m³ ACGIH A2; IARC 1	
EV (Canada)	Long-term value: 0.2 mg/m³	
LMPE (Mexico)	Long-term value: 0.2* mg/m³ A2;*fracción torácica	

- · Exposure controls
- General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eves and skin.

- · Engineering controls: Provide adequate ventilation.
- · Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands:



Protective gloves

Material of gloves

Butyl rubber, BR

Nitrile rubber, NBR

Neoprene gloves

Fluorocarbon rubber (Viton)

Natural rubber, NR

Sensibilization by the components in the glove materials is possible.

· Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

Body protection: Protective work clothing

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· Limitation and supervision of exposure into the environment

No relevant information available.

9 Physical and chemical properties

Information on basic physical a Appearance:	nd chemical properties
Form: Color: · Odor:	Liquid Clear Acrid
· Odor threshold:	Not determined.
· pH-value: · Melting point/Melting range: · Boiling point/Boiling range:	Not determined. Not determined. 101-103 °C (213.8-153.4 °F)
· Flash point:	The product is not flammable.
· Flammability (solid, gaseous):	Not applicable.
· Auto-ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits Lower: Upper: · Oxidizing properties:	Not determined. Not determined. Not determined.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
Density at 20 °C (68 °F): Relative density: Vapor density: Evaporation rate:	1.11 g/cm³ (9.26 lbs/gal) Not determined. Not determined. Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.

Not determined.

Not determined.

No relevant information available.

10 Stability and reactivity

· Viscosity

Dynamic:

Kinematic:

Other information

- · Reactivity: No relevant information available.
- · Chemical stability: Stable under normal temperatures and pressures.
- Thermal decomposition / conditions to be avoided:

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(Cont'd. of page 5)

No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions

Reacts with alkali (lyes).

Corrosive action on metals.

Reacts with certain metals.

Reacts with strong oxidizing agents.

Toxic fumes may be released if heated above the decomposition point.

- · Conditions to avoid No relevant information available.
- Incompatible materials

Alkalis.

Metals.

· Hazardous decomposition products

Under fire conditions only:

Sulfur oxides (SOx)

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- · LD/LC50 values that are relevant for classification: None.
- · Primary irritant effect:
- · On the skin: Irritant to skin and mucous membranes.
- · On the eye: Causes eye irritation.
- · Sensitization: Based on available data, the classification criteria are not met.
- · IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

7664-93-9 Sulfuric acid

K

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

Probable route(s) of exposure:

Ingestion.

Inhalation.

Eve contact.

Skin contact.

- · Acute effects (acute toxicity, irritation and corrosivity): Irritating to eyes and skin.
- · Repeated dose toxicity: No relevant information available.
- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · Carcinogenicity: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: Based on available data, the classification criteria are not met.
- · STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

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

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

• Other adverse effects No 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. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- 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, ADR/RID/ADN, IMDG, IATA	UN3264
UN proper shipping name DOT ADR/RID/ADN, IMDG, IATA	Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid) CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID)
· Transport hazard class(es)	
DOT	
Class	8
· Label	8

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(Cont'd. of page 7) · ADR/RID/ADN · Class 8 (C1) · Label · IMDG. IATA 8 · Class · Label 8 · Packing group · DOT, ADR/RID/ADN, IMDG, IATA Ш · Environmental hazards Not applicable. Special precautions for user Warning: Corrosive substances · Hazard identification number (Kemler code): · EMS Number: F-A,S-B · Segregation groups Acids

15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Not applicable.

- · United States (USA)
- ·SARA
- · Section 302 (extremely hazardous substances):

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

7664-93-9 Sulfuric acid

· TSCA (Toxic Substances Control Act)

7664-93-9 Sulfuric acid

7732-18-5 Water

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for females:

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None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

All components have the value *.

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.

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Met. Corr.1: Corrosive to metals - Category 1

Skin Corr. 1A: Skin corrosion/irritation - Category 1A

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

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Safety Data Sheets, Individual Manufacturers

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