acc. 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 Phone: (717)632-1291 Toll-Free: (866)632-1291 info@aquaphoenixsci.com

· 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.

P280 Wear protective gloves and eye protection. 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.

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

P390 Absorb spillage to prevent material damage.

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

• 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.

- · 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.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.

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- 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: Keep containers tightly sealed.
- · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

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· Control parameters

Components with limit values that require monitoring at the workplace: 7664-93-9 Sulfuric acid				
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 eyes and skin.

- Engineering controls: Provide adequate 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
- Limitation and supervision of exposure into the environment

No relevant information available.

9 Physical and chemical properties

Information on basic physical and chemical properties

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Appearance:		
Form:	Liquid	
Color:	Clear	
Odor:	Acrid	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Melting point/Melting range:	Not determined.	
Boiling point/Boiling range:	101-103 °C (213.8-217.4 °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:	Not determined.	
Upper:	Not determined.	
Oxidizing properties:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density at 20 °C (68 °F):	1.11 g/cm³ (9.26 lbs/gal)	
Relative density:	Not determined.	
Vapor density:	Not determined.	
Evaporation rate:	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/water	er): Not determined.	
Viscosity		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Other information	No relevant information available.	

10 Stability and reactivity

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

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.

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- · 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.

Eye 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

- · 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:

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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.

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

UN-Number	
DOT, ADR/RID/ADN, IMDG, IATA	UN3264
UN proper shipping name	
DOT	Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid
ADR/RID/ADN, IMDG, IATA	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O (SULPHURIC ACID)
Transport hazard class(es)	
DOT	
COSTOCOTO	
Class	8
Label	8
ADR/RID/ADN	
Class	8 (C1)

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Label	8	
· IMDG, IATA		
Class	8	
Label	8	
Packing group DOT, ADR/RID/ADN, IMDG, IATA	III	
Environmental hazards	Not applicable.	
Special precautions for user	Warning: Corrosive substances	
Danger code (Kemler):	80 5 A S B	
EMS Number:	F-A,S-B Acids	
Segregation groups		
Transport in bulk according to Annex		
MARPOL73/78 and the IBC Code	Not applicable.	
Transport/Additional information:		
DOT		
Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L	

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

7664-93-9 Sulfuric acid

· Section 313 (Specific toxic chemical listings):

7664-93-9 Sulfuric acid

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

- · 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) (Substances not listed.):

All ingredients listed on DSL or NDSL.

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

PBT: Persistant, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

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

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

SDS Prepared by:

ChemTel Inc.

1305 North Florida Avenue

Tampa, Florida USA 33602-2902

Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

Website: www.chemtelinc.com