Page: 1/9

Safety Data Sheet

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

Revision: August 12, 2020

1 Identification

· Product identifier

· Trade name: Quinhydrone, ACS Grade

· Product code: QH2000

· **CAS Number:** 106-34-3

· 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

Acute Tox. 3 H301 Toxic if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

STOT RE 2 H373 May cause damage to the liver through prolonged or repeated exposure.

- · Label elements
- · GHS label elements

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

· Hazard pictograms:







GHS06 GHS07 GHS08

· Signal word: Danger

Hazard statements:

H301 Toxic if swallowed.

H315 Causes skin irritation.

(Cont'd. on page 2)

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

Revision: August 12, 2020

Trade name: Quinhydrone, ACS Grade

(Cont'd. of page 1)

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H373 May cause damage to the liver through prolonged or repeated exposure.

· Precautionary statements:

P260 Do not breathe mist/vapors/spray. P264 Wash 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/protective clothing/eye protection/face protection.

P301+P310 If swallowed: Immediately call a poison center/doctor.

P330 Rinse mouth.

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

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

present and easy to do. Continue rinsing.

P314 Get medical advice/attention if you feel unwell.
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.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

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

3 Composition/information on ingredients

- Chemical characterization: Substances
- · CAS No. Description 106-34-3 quinhydrone

4 First-aid measures

- Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Brush off loose particles from skin.

Immediately rinse with water.

If skin irritation is experienced, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. Then 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:

May cause gastro-intestinal irritation if ingested.

Nausea in case of ingestion.

(Cont'd. on page 3)

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

Revision: August 12, 2020

Trade name: Quinhydrone, ACS Grade

(Cont'd. of page 2)

Irritating to eyes, respiratory system and skin.

- Danger: Toxic if swallowed.
- 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.
- · For safety reasons unsuitable extinguishing agents: No relevant information available.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · 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

Wear protective equipment. Keep unprotected persons away.

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

- Environmental precautions Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up

Sweep up and place into an appropriate container.

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: 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 in a cool location.

Protect from humidity and water.

Due to photo-sensitivity, store product in brown-glass receptacles.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

· Further information about storage conditions:

(Cont'd. on page 4)

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

Revision: August 12, 2020

Trade name: Quinhydrone, ACS Grade

(Cont'd. of page 3)

Protect from sunlight.

Keep containers tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

- · Engineering controls: Provide adequate ventilation.
- · Breathing equipment:

Not required under normal conditions of use.

Use suitable respiratory protective device when high concentrations are present.

Protection of hands:



Protective gloves

· Material of gloves

Nitrile rubber, NBR

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

Neoprene gloves

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
- · Appearance:

Form: Crystalline powder

(Cont'd. on page 5)

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

Revision: August 12, 2020

Trade name: Quinhydrone, ACS Grade

		(Cont'd. of page
Color:	Dark green	
· Odor:	Odorless	
Odor threshold:	Not determined.	
· pH-value:	Not applicable.	
· Melting point/Melting range:	170 °C (338 °F)	
· Boiling point/Boiling range:	Not determined.	
Flash point:	The product is not flammable.	
Flammability (solid, gaseous):	Product is not flammable.	
· 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:	Non-oxidizing.	
· Vapor pressure:	Not determined.	
Density at 20 °C (68 °F):	1.4 g/cm³ (11.68 lbs/gal)	
Relative density:	Not determined.	
· Vapor density:	Not applicable.	
Evaporation rate:	Not applicable.	
· Solubility in / Miscibility with		
Water at 20 °C (68 °F):	4 g/l	
Partition coefficient (n-octanol/water): Not determined.	
·Viscosity		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
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

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

Reacts with oxidizing agents.

Photoreactive.

· Conditions to avoid

Direct sunlight.

Excessive heat.

· Incompatible materials Oxidizing agents.

(Cont'd. on page 6)

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

Revision: August 12, 2020

Trade name: Quinhydrone, ACS Grade

(Cont'd. of page 5)

· Hazardous decomposition products

Under fire conditions only:

Carbon monoxide and carbon dioxide

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity: Toxic if swallowed.
- · LD/LC50 values that are relevant for classification:

106-34-3 quinhydrone

Oral LD50 225 mg/kg (rat)

- 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):

Substance is not listed.

NTP (National Toxicology Program):

Substance is not listed.

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

Substance is not listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eye contact.

Skin contact.

· Acute effects (acute toxicity, irritation and corrosivity):

Toxic if swallowed.

Irritating to eyes, respiratory system and skin.

- · Repeated dose toxicity: Possible risk of irreversible effects.
- · 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: May cause respiratory irritation.
- STOT-repeated exposure: May cause damage to the liver through prolonged or repeated exposure.
- · 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

(Cont'd. on page 7)

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

Revision: August 12, 2020

Trade name: Quinhydrone, ACS Grade

(Cont'd. of page 6)

· General notes:

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

• Other adverse effects No relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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.

4 Transport information		
· UN-Number · DOT, ADR/RID/ADN, IMDG, IATA	UN2811	
· UN proper shipping name		
· DOT	Toxic solids, organic, n.o.s. (quinhydrone)	
· ADR/RID/ADN	TOXIC SOLID, ORGANIC, N.O.S. (QUINHYDRONE	
IMPO	ENVIRONMENTALLY HAZARDOUS	
· IMDG	TOXIC SOLID, ORGANIC, N.O.S. (QUINHYDRONE MARINE POLLUTANT	
·IATA	TOXIC SOLID, ORGANIC, N.O.S. (QUINHYDRONE	
· Transport hazard class(es)		
· DOT		
Touc Land		
· Class	6.1	
Label	6.1	
· ADR/RID/ADN		
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		
· Class	6.1 (T2)	
· Label	6.1	

Page: 8/9

Safety Data Sheet

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

Revision: August 12, 2020

Trade name: Quinhydrone, ACS Grade

(Cont'd. of page 7) ·IMDG 6.1 · Class · Label 6.1 · IATA 6.1 · Class · Label 6.1 · Packing group · DOT, ADR/RID/ADN, IMDG, IATA Ш · Environmental hazards · Marine pollutant: Yes (DOT) Symbol (fish and tree) Special precautions for user Warning: Toxic substances Hazard identification number (Kemler code): Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

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

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act)

All ingredients are listed or exempt.

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

Substance is not listed.

· Chemicals known to cause developmental toxicity for females:

Substance is not listed.

(Cont'd. on page 9)

Page: 9/9

Safety Data Sheet

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

Revision: August 12, 2020

Trade name: Quinhydrone, ACS Grade

(Cont'd. of page 8)

· Chemicals known to cause developmental toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· EPA (Environmental Protection Agency):

Substance is not listed.

IARC (International Agency for Research on Cancer):

Substance is not listed.

· Canadian Domestic Substances List (DSL):

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

OSHA: Occupational Safety & Health Administration

Acute Tox. 3: Acute toxicity - Category 3

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

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

· 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

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