According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 01.27.2018

Hydroquinone,

SECTION 1: Identification

Product identifier

Product name: Hydroquinone, Product code: S25362

Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable. Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: Supplier:

AquaPhoenix Scientific	Fisher Science Education
860 Gitts Run Road	6771 Silver Crest Road
Hanover	Nazareth
PA 17331	PA 18064
(717) 632-1291	800 955-1177

Emergency telephone number: United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard(s) identification

GHS classification:

Acute toxicity (oral), category 4 Skin sensitization, category 1 Serious eye damage, category 1 Germ cell mutagenicity, category 2 Carcinogenicity, category 2 Acute aquatic hazard, category 1

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

- H302 Harmful if swallowed
- H317 May cause an allergic skin reaction
- H318 Causes serious eye damage
- H341 Suspected of causing genetic defects
- H351 Suspected of causing cancer
- H400 Very toxic to aquatic life

Precautionary statements:

P264 Wash skin thoroughly after handling

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Hydroquinone, P270 Do not eat, drink or smoke when using this product P261 Avoid breathing dust/fume/gas/mist/vapors/spray P272 Contaminated work clothing should not be allowed out of the workplace P280 Wear protective gloves/protective clothing/eye protection/face protection P201 Obtain special instructions before use P202 Do not handle until all safety precautions have been read and understood P273 Avoid release to the environment P301+P330+P312 IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell. P321 Specific treatment (see supplemental first aid instructions on this label). P363 Wash contaminated clothing before reuse P302+P352 If on skin: Wash with soap and water P333+P313 If skin irritation or a rash occurs: Get medical advice/attention P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. P308+P313 If exposed or concerned: Get medical advice/attention P391 Collect spillage P405 Store locked up P501 Dispose of contents and container as instructed in Section 13 Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 123-31-9	Hydroquinone, Lab Grade	100

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention Remove contact lens(es) if able to do so during rinsing Immediately call a POISON CONTROL CENTER or seek medical attention

After swallowing:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists Call a POISON CONTROL CENTER or seek medical attention if you feel unwell Do not induce vomiting Rinse mouth and then drink plenty of water

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Hydroquinone,

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing Refer to Section 8

Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols Avoid contact with skin, eyes and clothing

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

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Hydroquinone,

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
United States (OSHA)	Hydroquinone, Lab Grade		PEL TWA (Total Dust) 15 mg/m ³ (50 mppcf*)
ACGIH	Hydroquinone, Lab Grade		TLV TWA (inhalable particles) 10 mg/m3.

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	White to off-white solid
Odor	Odorless
Odor threshold	Not determined or not available.
рН	3.75 (70g/l aq. soln)
Melting point/freezing point	170 - 174 C
Initial boiling point/range	285 - 287 C
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	0.00067 mmHg @ 25 C
Vapor density	3.8 (air=1)
Density	Not determined or not available.
Relative density	1.320 g/cm3

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Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Harmful if swallowed

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

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

Product data: No data available.

Substance data: No data available.

Serious eye damage/irritation

Assessment: Causes serious eye damage

Product data: No data available.

Substance data: No data available.

Respiratory or skin sensitization

Assessment: May cause an allergic skin reaction

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Suspected of causing cancer

Product data: No data available.

Substance data: No data available.

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Hydroquinone,

International Agency for Research on Cancer (IARC): None of the ingredients are listed. National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Suspected of causing genetic defects

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

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

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

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

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

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

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

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

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Very toxic to aquatic life Product data: No data available.

Substance data:

Name	Result
Hydroquinone, Lab Grade	Rainbow trout:, $LC50 = 0.097 \text{ mg/L}$; 96 Hr
	Fathead Minnow: , LC50 = $0.1 - 0.18 \text{ mg/L}$; 96 Hr
	Phytobacterium phosphoreum., EC50 =0.77 - 3.97 mg/L5,15,30 minutes

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

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Hydroquinone,

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	3077
UN proper shipping name	ENVIRONMENTALLY HAZ ARDOUS SUBSTANCES , SOLID, N.O.S.
UN transport hazard class(es)	9
Packing group	III
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	3077
UN proper shipping name	ENVIRONMENTALLY HAZ ARDOUS SUBSTANCES , SOLID, N.O.S.
UN transport hazard class(es)	9
Packing group	111
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	3077
UN proper shipping name	ENVIRONMENTALLY HAZ ARDOUS SUBSTANCES , SOLID, N.O.S.
UN transport hazard class(es)	9
Packing group	III
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

United States regulations

Inventory listing (TSCA):

123-31-9 Hydroquinone, Lab Grade

Listed

Significant New Use Rule (TSCA Section 5): Not determined. Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

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Acute	Chronic	Fire	Pressure	Reactive	e
No	No	No	No	No	-
SARA Section 30	2 extremely hazard	ous substances	: Not determined.		
	3 toxic chemicals:				
123-31-9	Hydroquinone,	Lab Grade			Liste
CERCLA:					
123-31-9	Hydroquinone,	Lab Grade		Listed	100
RCRA: Not determ	linear				
	ined. The Clean Air Act (CAA): Not detern	nined.		
	the Clean Air Act (CAA): Not detern	nined.		
Section 112(r) of	the Clean Air Act (nined.		Liste
Section 112(r) of Massachusetts R	the Clean Air Act (ight to Know: Hydroquinone,		nined.		Liste
Section 112(r) of Massachusetts R 123-31-9	the Clean Air Act (ight to Know: Hydroquinone,	Lab Grade	nined.		Liste
Section 112(r) of Massachusetts R 123-31-9 New Jersey Right	t to Know: Hydroquinone, Hydroquinone, Hydroquinone,	Lab Grade	nined.		
Section 112(r) of Massachusetts R 123-31-9 New Jersey Right 123-31-9	t to Know: Hydroquinone, Hydroquinone, Hydroquinone,	Lab Grade Lab Grade	nined.		
Section 112(r) of Massachusetts R 123-31-9 New Jersey Right 123-31-9 New York Right t	the Clean Air Act (ight to Know: Hydroquinone, to Know: Hydroquinone, to Know: Hydroquinone,	Lab Grade Lab Grade	nined.		Liste

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 2-1-0

HMIS: 2-1-0

Initial preparation date: 01.27.2018

End of Safety Data Sheet