Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Section 1: Identification

Product Name Hydroquinone USP
Commercial Name Not available
Product Use Pharmaceutical
Restrictions On Use Not available

Product Code 50-1124

Company
PCCA
9901 South Wilcrest
Houston, TX 77099
Phone: 1-800-331-2498
Fax: 1-800-874-5760

In case of emergency contact:
CHEMTREC (24hr) 1-800-424-9300

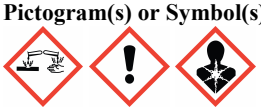
Section 2: Hazard(s) Identification

OSHA Haz Com: CFR 1910.1200 Acute toxicity, oralHealth hazards Category 4 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 1 Sensitization, skin Category 1 Germ cell mutagenicity Category 2 Carcinogenicity Category 2

Signal Word DANGER

Hazard Statement(s) Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing genetic defects. Suspected of causing cancer.

Pictogram(s) or Symbol(s)



Precautionary Statement(s):

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace.

Response If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. 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/doctor. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If exposed or concerned: Get medical advice/attention.

Storage Store locked up

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

Section 3: Composition/Information on Ingredients

Substance/Mixture Substance
Components Hydroquinone
% By Weight 100
CAS# 123-31-9
Molecular Weight 110.11 g/mole
Chemical Formula C6H4(OH)2
Synonym(s) 1,4-Benzenediol

Mixtures

Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Hydroquinone	123-31-9	100	TWA: 2 (mg/m3)	ORAL (LD50): Acute: 320 mg/kg [Rat]. DERMAL (LD50): Acute: 5970 mg/kg [Mammal].

Section 4: First-Aid Measures

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin Contact Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Eye Contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Call a physician or poison control center immediately. Continue rinsing.

Ingestion Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell

Symptoms/Effects

Acute Pharmacologically active material. Occupational exposure may cause physiological effects

Delayed Pharmacologically active material. Occupational exposure may cause physiological effects

Immediate Medical Attention

Provide general supportive measures and treat symptomatically.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

Water. Foam. Dry chemical or CO2. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable Extinguishing Media

Not available.

Products of Combustion

Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard

Firefighters Special Equipment and Precautions

Wear suitable protective equipment. Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing. Use standard firefighting procedures and consider the hazards of other involved materials

Section 6: Accidental Release Measures

Keep unnecessary personnel away. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate personal protective equipment. Avoid inhalation of dust from the spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. For personal protection, see section 8 of the SDS. Methods and materials for containment and cleaning up: Avoid the generation of dusts during clean-up. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

Section 7: Handling and Storage

Handling: As a general rule, when handling USP materials, avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Combustible dust clouds may be created where operations produce fine material (dust). Select and use containment devices and personal protective equipment based on a risk assessment of material potency and exposure potential. Storage: Store in tight container. This material should be handled and stored per label instructions to ensure product integrity.

Section 8: Exposure Controls/Personal Protection

Exposure Limits US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) PEL 2 mg/m3 US. ACGIH Threshold Limit Values TWA 1 mg/m3 US. NIOSH: Pocket Guide to Chemical Hazards Ceiling 2 mg/m3

Engineering Controls	For laboratory operations, use local exhaust ventilation or a ventilated enclosure for high energy operations such as particle sizing. Control exposures to below the occupational exposure level (if available). Select and use containment devices and personal protective equipment based on a risk assessment of exposure potential. Cover all containers for solutions and slurries while being transferred.
Personal Protection	Eye/face protection: Wear safety glasses with side shields, chemical splash goggles, or full face shield, if necessary. Base the choice of protection on the job activity and potential for contact with eyes or face. An emergency eye wash station should be available. Skin protection Hand protection: Wear nitrile or other impervious gloves if skin contact is possible. When the material is dissolved or suspended in an organic solvent, wear gloves that provide protection against the solvent. Other: Train employees in proper gowning and degowning practices. Wear lab coat. Base the choice of skin protection on the job activity, potential for skin contact and solvents and reagents in use. Do not wear protective garments in common areas (e.g., cafeterias) or out-of-doors. Respiratory protection: Respirators are generally not required for laboratory operations. Use a tight-fitting full-face respirator with HEPA filters for spill cleanup. Choose respiratory protection appropriate to the task and the level of existing engineering controls. Thermal hazards: Wear appropriate thermal protective clothing, when necessary. General hygiene considerations: Handling practices in this SDS are recommendations for laboratory use of USP materials.

Section 9: Physical and Chemical Properties

Appearance	Solid. Solid. Crystals. Needles Color: Tan. Grey. Colorless. White.
Odor	Odorless
Odor Threshold	Not available

Melting Point	338 - 345.2 °F (170 - 174 °C)	**pH**	in aqueous solution 3.7 Solution: 7
Freezing Point	Not available	**Vapor Pressure**	0.00009 kPa at 25 °C
Boiling Point/Range	545 - 548.6 °F (285 - 287 °C)	**Vapor Density**	3.81 (air=1)
Decomposition temperature	(DSC) No exotherm to 450C	**Viscosity**	Not available.
Partition Coefficient: n-octanol/water	0.59	**Evaporation Rate**	Not available
Flash Point	Not available	**Autoignition temperature**	960.01 °F (515.56 °C)
Flammability	Not available	**Flammability or Explosive Limits:**	
		Lower	Not available
		Upper	Not available

Solubility(ies)	70 g/l Freely soluble in water.
Other	Acetone: Soluble. Alcohol: Freely soluble. Benzene: Slightly soluble. Carbontetrachloride: Very soluble. Ether: Freely soluble. Chemical family Phenol derivative. Molecular formula C6H6O2 Molecular weight 110.11 Percent volatile 0 % VOC 0 %

Section 10: Stability and Reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical Stability	Material is stable under normal conditions
Hazardous Polymerization	No dangerous reaction known under conditions of normal use
Conditions to Avoid	Contact with incompatible materials.
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions.

Section 11: Toxicological Information

RTECS MX3500000

Acute Toxicity
Harmful if swallowed. Acute Dermal LD50 Rabbit > 2000 mg/kg Oral LD50 Mouse 245 mg/kg Rat 302 mg/kg

Skin Corrosion/Irritation
Causes skin irritation

Serious Eye Damage/Irritation
Causes serious eye damage.

Respiratory or Skin Sensitization
May cause an allergic skin reaction.

Germ Cell Mutagenicity
Suspected of causing genetic defects.

Carcinogenicity
Suspected of causing cancer.

Reproductive Toxicity
Not available

Routes of Entry
Skin. Eye. Ingestion.

Symptoms Related to Exposure
Shortness of breath. Ringing or buzzing in ears. Gastrointestinal disturbances. Dizziness. Headache. Loss of appetite. Sense of suffocation. Green or brownish discoloration or urine. Pale or bluish skin. Muscle twitching. Convulsions. Delirium. Collapse.

Potential Health Effects
Not available

Target Organ(s) Not available

Section 12: Ecological Information

Ecotoxicity
Aquatic Crustacea EC50 Water flea (Daphnia magna) 0.12 - 0.15 mg/l, 48 hours Fish LC50 Rainbow trout,donaldson trout (Oncorhynchus mykiss) 0.044 mg/l, 96 hours

Persistance and Degradability
Not available

Bioaccumulative Potential
Not available

Mobility in Soil
Not available

Other Adverse Effects
Not available

Section 13: Disposal Considerations

Waste Disposal
Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. The waste code should be assigned in discussion between the user, the producer and the waste disposal company. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Disposal of Container
Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Other Considerations
Not available

Section 14: Transport Information

DOT Classification
DOT UN number: UN3077 UN proper shipping name: Environmentally hazardous substances, solid, n.o.s. (Hydroquinone RQ = 100 LBS) Transport hazard class(es) Class 9 Subsidiary risk - Packing group III Packaging exceptions 155 Packaging non bulk 213 Packaging bulk 240

Section 15: Regulatory Information

Regulations

US federal regulations: All components are on the U.S. EPA TSCA Inventory List. CERCLA/SARA Reportable Quantities: 100 lb (45.4 kg) This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. Toxic Substances Control Act (TSCA) TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4) Hydroquinone (CAS 123-31-9) Listed. SARA 304 Emergency release notification Hydroquinone (CAS 123-31-9) 100 LBS OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053) Not listed. SARA 302 Extremely hazardous substance Superfund Amendments and Reauthorization Act of 1986 (SARA) Chemical name CAS number Reportable quantity (pounds) Threshold planning quantity (pounds) Threshold planning quantity, lower value (pounds) Threshold planning quantity, upper value (pounds) Hydroquinone 123-31-9 100 500 10000 YesSARA 311/312 Hazardous chemical Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation Respiratory or skin sensitization Germ cell mutagenicity Carcinogenicity Classified hazard categories SARA 313 (TRI reporting) Chemical name % by wt.CAS number Hydroquinone 100123-31-9 Other federal regulations Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Hydroquinone (CAS 123-31-9) Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated. Not regulated.Safe Drinking Water Act (SDWA) California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins

Other

Not available.

Section 16: Other Information

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