

# Safety Data Sheet

## HYDROQUINONE CRYSTALS

### Section 1 - Chemical Product and Company Identification

**SDS Name:** Hydroquinone Crystals

**Catalog Numbers:** K-697-3

**Company Identification:** Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923

**For information, call:** 978-739-4883

**Emergency Number:** 800-424-9300

**For CHEMTREC assistance, call:** 800-424-9300

### Section 2 - Hazards Identification

#### GHS Classifications

H302-Acute toxicity, oral: 4

H317-Sensitisation, skin: 1

H318-Serious eye damage/eye irritation: 1

H335-Specific target organ toxicity, single exposure; Respiratory tract irritation: 3

H341-Germ cell mutagenicity: 2

H351-Carcinogenicity: 2

H400-Hazardous to the aquatic environment, acute toxicity: 1

H410-Hazardous to the aquatic environment, chronic toxicity: 1

#### Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Danger

#### Hazard statements:

H302-Harmful if swallowed

H317-May cause an allergic skin reaction

H318-Causes serious eye damage

H335-May cause respiratory irritation  
H341-Suspected of causing genetic defects  
H351-Suspected of causing cancer  
H400-Very toxic to aquatic life  
H410-Very toxic to aquatic life with long lasting effects

## Precautionary Statements:

P201-Obtain special instructions before use.  
P202-Do not handle until all safety precautions have been read and understood.  
P261-Avoid breathing dust/fume/gas/mist/vapours/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.  
P272-Contaminated work clothing should not be allowed out of the workplace.  
P273-Avoid release to the environment.  
P280-Wear protective gloves/eye protection/face protection.  
P281-Use personal protective equipment as required.  
P301+P312-If swallowed: Call a Poison Center or doctor/physician if you feel unwell.  
P302+P352-If on skin: Wash with plenty of soap and water.  
P304+P340-If inhaled: Remove victim to fresh air and keep at rest in a position 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.  
P308+P313-If exposed or concerned: Get medical advice/attention.  
P310-Immediately call a Poison Center or doctor/physician.  
P312-Call a Poison Center or doctor/physician if you feel unwell.  
P330-Rinse mouth.  
P333+P313-If skin irritation or rash occurs: Get medical advice/attention.  
P362+P364-Take off contaminated clothing and wash it before reuse.  
P363-Wash contaminated clothing before reuse.  
P391-Collect spillage.  
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.

## Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
123-31-9	Hydroquinone Crystals	≥100

## Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical advice.

**Oral Exposure:** If swallowed, seek immediate medical advice. Rinse mouth with water. After rinsing, drink water.

**Inhalation Exposure:** If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use dry chemical, carbon dioxide, dry sand, water spray or alcohol-resistant foam.

**Hazardous Combustion Products:** Carbon oxides.

**Flash Point:** 165°C

**Autoignition Temperature:** 520°C

**Explosion Limits, Lower:** Not available

**Upper:** Not available

**NFPA Rating:** (estimated) Health: 2; Flammability: 1; Instability: 1

## Section 6 - Accidental Release Measures

### **Procedure(s) of Personal Precaution(s):**

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation. Avoid dust formation.

**Methods for Cleaning up:** Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Avoid generating dusty conditions. Do not release to the environment. Do not release to drains.

## Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Ensure adequate ventilation. Wash thoroughly after handling. Minimize dust generation and accumulation. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Store in a tightly closed container in a cool, dry, and well-ventilated area. Protect from heat. Air and light sensitive. Keep away from incompatible materials.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

### Exposure Limits:

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Hydroquinone CAS#123-31-9	1 mg/m <sup>3</sup> TWA	2 mg/m <sup>3</sup> Ceiling 50 mg/m <sup>3</sup> IDLH	2 mg/m <sup>3</sup> TWA

**OSHA Vacated PELs:** Hydroquinone: 2 mg/m<sup>3</sup> TWA

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance:** Off-white

**Odor:** Odorless

**Vapor Pressure:** 1 mmHg at 132°C

**Odor threshold:** Not available

**Vapor Density:** 3.80 (Air=1.0)

**pH:** 3.75 (70 g/L aqueous solution)

**Relative density:** Not available

**Melting point/freezing point:** 170-174°C

**Solubility:** Soluble in water

**Boiling Point:** 285-287°C

**Flash point:** 165°C

**Evaporation Rate:** Not applicable

**Flammability (solid, gas):** Not available

**Partition coefficient: n-octanol/water:** log Pow: 0.59

**Auto-ignition temperature:** 520°C

**Decomposition temperature:** Not available

**Viscosity:** Not applicable

**Specific Gravity/Density:** 1.320

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures. Air and light sensitive.

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat. Exposure to air and light. Avoid dust formation.

**Incompatibilities with Other Materials:** Strong oxidizing agents, strong bases, and alkalines.

**Hazardous Decomposition Products:** Carbon oxides.

## Section 11 - Toxicological Information

**CAS#123-31-9 Hydroquinone: RTECS#: MX3500000**

LD50 Oral: 367.3 mg/kg (rat)

LD50 Dermal: 74800 mg/kg (rat)

LC50 Inhalation: Not available

**Carcinogenicity:** Hydroquinone CAS#123-31-9 is not listed by IARC, NTP, OSHA, or California Prop 65. Hydroquinone is listed by ACGIH (A3, Animal Carcinogen).

**Information on the likely routes of exposure:** Routes of entry anticipated: oral, dermal, inhalation, eye.

**Epidemiology:** Not available.

**Teratogenicity:** Not available.

**Reproductive Effects:** Experiments have shown reproductive toxicity effects on laboratory animals.

**Developmental Effects:** Not available.

**Neurotoxicity:** Not available.

**Mutagenicity:** Mutagenic category 2. Suspected of causing genetic defects.

**Specific Target Organ Toxicity, Single Exposure:** Respiratory system and central nervous system.

**Specific Target Organ Toxicity, Repeated Exposure:** Not available.

**Symptoms associated with exposure:** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

**The toxicological properties of this material have not been thoroughly investigated.**

## Section 12 - Ecological Information

**Ecotoxicity:** Do not release to the environment. Do not release to drains. Very toxic to aquatic life.

**CAS#123-31-9 Hydroquinone:**

LC50, freshwater fish: 0.17 mg/L 96h (brachydanio rerio)  
LC50, freshwater fish: 0.044 mg/L 96h flow-through (oncorhynchus mykiss)  
LC50, freshwater fish: 0.044 mg/L 96h flow-through (pimephales promelas)  
LC50, freshwater fish: 0.1-0.18 mg/L 96h static (pimephales promelas)

EC50, freshwater algae: 0.335 mg/L 72h (pseudokirchneriella subcapitata)  
EC50, water flea: 0.29 mg/L 48h (daphnia magna)  
EC50, microtox: 0.042 mg/L 5min  
EC50, microtox: 23.75 mg/L 60min

**Persistence and degradability:** Persistence is unlikely based on available information.

**Bio-accumulative potential:** Bioaccumulation is not expected.

**Mobility:** Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations
--------------------------------------

**DISPOSAL:** Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information
------------------------------------

**DOT**

UN3077

Environmentally hazardous substance, solid, N.O.S. (Hydroquinone)

PG III

Hazard class 9

Section 15 - Regulatory Information
-------------------------------------

**Canada Regulatory Information**

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information
-------------------------------------

**SDS Creation Date:** 9-16-22

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Rowley Biochemical, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rowley Biochemical, Inc. has been advised of the possibility of such damages.*