SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation: Hydroquinone

Product Number: RDCH0300

Other Identifying Product Numbers: RDCH0300-500B1

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

1.3. Details of the Supplier of the Safety Data Sheet

Company: Ricca Chemical Company

Address: 448 West Fork Drive

Arlington, TX 76012 USA

Telephone: 888-467-4222

1.4. Emergency Telephone Number (24 hr)

CHEMTREC (USA) 800-424-9300 CHEMTREC (International) 1+ 703-527-3887

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RICCA CHEMICAL COMPANY®

Safety Data Sheet

SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture (in accordance with OSHA HCS 29 CFR 1910.1200)

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

		Hazard	
Hazard Class	Category	Statement	Precautionary Statements
Acute Toxicity - Oral	Category 2	H300	P264, P270, P301+P310, P321, P330, P405, P501
Skin Corrosion / Irritation	Category 2	H315	P264, P280, P302+P352, P321, P332+P313, P362
Eye Damage / Irritation	Category 1	H318	P280, P305+P351+P338, P310
Respiratory Sensitizer	Category 1	H334	P261, P285, P304+P341, P342+P311, P501
Skin Sensitizer	Category 1	H317	P261, P272, P280, P302+P352, P332+P313, P321, P363, P501
Germ Cell Mutagenicity	Category 1	H340	P201, P202, P280, P308+P313, P405, P501
Carcinogenicity	Category 2	H351	P201, P202, P280, P308+P313, P405, P501
Reproductive Toxicity	Category 1	H360	P201, P202, P280, P308+P313, P405, P501
Specific Target Organs/Systemic Toxicity Following Single Exposure	Category 1	H370	P260, P264, P270, P307+P311, P321, P405, P501
Specific Target Organs/Systemic Toxicity Following Repeated Exposure	Category 1	H372	P260, P264, P270, P314, P501
Hazardous to the Aquatic Environment (Acute)	Category 1	H400	P273, P501
Hazardous to the Aquatic Environment (Chronic)	Category 1	H400	P273, P501

2.2. GHS Label Elements

Pictograms:









Signal Word: Danger

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Hazard Statements:

Hazard Number	Hazard Statement	
H300	Fatal if swallowed.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
H340	May cause genetic defects.	
H351	Suspected of causing cancer.	
H360	May damage fertility or the unborn child.	
H370	Causes damage to organs.	
H372	Causes damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	

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Precautionary Statements:

ecautionary Statements:		
Precautionary Number	Precautionary Statement	
P201	Obtain special instructions before use.	
P202	Do not handle until all safety precautions have been read and understood.	
P260	Do not breathe dust/fumes.	
P261	Avoid breathing dust/fumes.	
P264	Wash arms, hands and face thoroughly after handling.	
P270	Do not eat, drink or smoke when using this product.	
P272	Contaminated work clothing must not be allowed out of the workplace.	
P273	Avoid release to the environment.	
P280	Wear protective gloves and eye protection.	
P285	In case of inadequate ventilation wear respiratory protection.	
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or physician.	
P302+P352	IF ON SKIN: Wash with plenty of soap and water.	
P304+P341	IF INHALED: If breathing is difficult, 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.	
P307+P311	IF exposed: Call a POISON CENTER or physician.	
P308+P313	IF exposed or concerned: Get medical attention.	
P310	Immediately call a POISON CENTER or physician.	
P314	Get medical attention if you feel unwell.	
P321	Specific treatment (Wash areas of contact with water).	
P330	Rinse mouth.	
P332+P313	If skin irritation occurs: Get medical attention.	
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or physician.	
P362	Take off contaminated clothing and wash it before reuse.	
P363	Wash contaminated clothing before reuse.	
P405	Store locked up.	
P501	Dispose of contents in accordance with local, state, federal and international regulations.	

2.3. WHMIS Classification

WHMIS classification is not included based on the recommended option (Option 4) found in the Canada Gazette Part II, Vol. 149, No.3, page 458

2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

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SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance or Mixture

Chemical Name	Formula	Molecular Weight	CAS Number	r Weight%
Hydroquinone	$C_6H_6O_2$	110.11 g/mol	123-31-9	100.00%

SECTION 4: First-Aid Measures

4.1. General First Aid Information

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing. May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva.

Inhalation: IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

Skin Contact: IF ON SKIN: Wash with plenty of soap and water. Causes irritation, redness, and pain. May cause sensitization and dermatitis.

May be absorbed through skin with toxic effects similar to ingestion.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or physician. Do not induce vomiting. Give large quantity of water. Call

a physician immediately.

4.2. Most Important Symptoms and Effects, Acute and Delayed

DANGER! Harmful if swallowed or inhaled. Considered toxic by OSHA (29 CFR 1910.1200). Causes irritation to eyes, skin, and respiratory tract. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: Causes irritation, redness, and pain. May cause sensitization and dermatitis. May be absorbed through skin with toxic effects similar to ingestion.

4.3. Medical Attention or Special Treatment Needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

SMALL FIRES: Dry chemical powder, carbon dioxide, water spray, alcohol, foam LARGE FIRES: Water spray, fog, alcohol foam

5.2. Specific Hazards Arising from the Substance or Mixture

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.3. Special Protective Equipment for Firefighters

Wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

6.2. Cleanup and Containment Methods and Materials

Collect solid for recovery or disposal, avoiding dust generation. Water may be used to reduce airborne dust and prevent scattering. Pick up spill for recovery or disposal and place in a closed container. Dispose of in accordance with local regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store locked up. Protect against physical damage. Keep in a tightly closed container. Store in a cool, dry well-ventilated location, away from oxidizing materials, heat, or ignition sources. Avoid dust formation.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control Parameters

Chemical Name	Limit Type	Country	Exposure Limit	Information Source
Hydroquinone (123-31-9)	TWA	USA	2 mg/m³ TWA	U.S OSHA - Final PELs - Time
				Weighted Averages (TWAs)
Hydroquinone (123-31-9)	TLV-TWA	USA	1 mg/m³ TWA	ACGIH - Threshold Limit Values - Time
				Weighted Averages (TLV-TWA)

8.2. Exposure Controls

Engineering Controls: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne

Exposure Limit.

Respiratory Protection: In case of inadequate ventilation wear respiratory protection. A system of local or general exhaust is

recommended to keep exposure levels below the Airborne Exposure Limits. If necessary, wear a dust mask

respirator to minimize exposure to dust particles.

Skin Protection: Wear protective gloves and eye protection. Chemical resistant gloves.

Eye Protection: Wear protective gloves and eye protection. Safety glasses or goggles.

8.3. Personal Protective Equipment

Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection. A system of local or general exhaust is recommended to keep exposure levels below the Airborne Exposure Limits. If necessary, wear a dust mask respirator to minimize exposure to dust particles. Chemical resistant gloves. Safety glasses or goggles.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Appearance: Colorless/white solid

Physical State: Solid

Odor: Odorless, lachrymator

Odor Threshold: Data not available.

pH: Data not available.

Melting/Freezing Point: 170 - 171°C

Initial Boiling Point /Range: 286°C - 286°C

Flash Point: 165°C

Evaporation Rate: Data not available.

Flammability: Data not available.

Flammability/Explosive Limits: Data not available.

Vapor Pressure: 0.00002 hPa at 25°C

Vapor Density: 3.81

Relative Density: 1.33

Solubility: 59 G/L at 15°C

Partition Coefficient (n-Octanol/Water): 0.5

Auto-Ignition Temperature: Data not available. **Decomposition Temperature:** Data not available.

Viscosity: Data not available.

ExplosiveProperties: Data not available. **Oxidizing Properties:** Data not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity and Chemical Stability

Stable under normal conditions of use and storage.

10.2. Possibility of Hazardous Reactions

Data not available.

10.3. Conditions to Avoid and Incompatible Materials

Strong oxidizers, strong alkalis.

10.4. Hazardous Decomposition Products

Will not occur.

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Fatal if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Rinse mouth. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Acute Toxicity - Dermal Exposure:

Not applicable.

Acute Toxicity - Inhalation Exposure:

Not applicable.

Acute Toxicity - Other Information:

LD50, Oral, Rat: 320 mg/kg, behavioral effects noted. Investigated as a tumorigen, mutagen, reproductive effector.

Skin Corrosion and Irritation:

Causes skin irritation. Wash arms, hands and face thoroughly after handling. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. Specific treatment (Wash areas of contact with water). If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.

Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. 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 physician.

Respiratory Sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Avoid breathing dust/fumes. In case of inadequate ventilation wear respiratory protection. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Dispose of contents in accordance with local, state, federal and international regulations.

Skin Sensitization:

May cause an allergic skin reaction. Avoid breathing dust/fumes. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves and eye protection. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention. Specific treatment (Wash areas of contact with water). Wash contaminated clothing before reuse. Dispose of contents in accordance with local, state, federal and international regulations.

Germ Cell Mutagenicity:

May cause genetic defects. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Carcinogenicity:

Suspected of causing cancer. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

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Reproductive Toxicity:

May damage fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific Target Organ Toxicity from Single Exposure:

Causes damage to organs. Do not breathe dust/fumes. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF exposed: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

Specific Target Organ Toxicity from Repeated Exposure:

Causes damage to organs through prolonged or repeated exposure. Do not breathe dust/fumes. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

Aspiration Hazard:

Not applicable.

Additional Toxicology Information:

Data not available.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Very toxic to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations. Very toxic to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.

12.2. Persistence and Degradability

Data not available.

12.3. Bioaccumulative Potential

Data not available.

12.4. Mobility in Soil

Data not available.

12.5. Other Adverse Ecological Effects

Data not available.

SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

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SECTION 14: Transportation Information

14.1. Transportation by Land - Department of Transportation (DOT, United States of America)

Sizes: 500 g

UN Number: UN3077

Proper Shipping Name: Environmentally hazardous substances, solid, n.o.s. (Hydroquinone)

Hazard Class: 9

Packing Group:

9

Sizes:

UN Number:

Proper Shipping Name:

Hazard Placard Labels:

Hazard Class:

Packing Group:

Hazard Placard Labels:

14.2. Transportation by Air - International Air Transport Association (IATA)

Sizes: 500 g

UN Number: UN3077

Proper Shipping Name: Environmentally hazardous substances, solid, n.o.s. (Hydroquinone)

Hazard Class: 9
Packing Group: |||

Hazard Placard Labels:



SECTION 15: Regulatory Information

15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

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15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Hydroquinone (CAS # 123-31-9): 100 lb EPCRA RQ Hydroquinone (CAS # 123-31-9): 500 lb lower TPQ; 10000 lb upper TPQ

- 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals
 Hydroquinone (CAS # 123-31-9): 100 lb final RQ; 45.4 kg final RQ
- 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

 Hydroquinone (CAS # 123-31-9): 1.0 % de minimis concentration
- 15.5. Massachusetts Right-to-Know Substance List

Hydroquinone (CAS # 123-31-9): Extraordinarily hazardous

15.6. Pennsylvania Right-to-Know Hazardous Substances

Hydroquinone (CAS # 123-31-9): Environmental hazard Hydroquinone (CAS # 123-31-9): Present

15.7. New Jersey Worker and Community Right-to-Know Components

Hydroquinone (CAS # 123-31-9): sn 1019 Hydroquinone (CAS # 123-31-9): SN 1019 500 lb TPQ

15.8. California Proposition 65

Not listed.

15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Hydroquinone (CAS # 123-31-9): Present (CEPA, subsection 81(3) applies) (DSL)

15.10. United States of America Toxic Substances Control Act (TSCA) List

Hydroquinone (CAS # 123-31-9): Present

15.11. European Inventory of Existing Commercial Chemical Substances (EINECS),
European List of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.

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SECTION 16: Other Information

16.1. Full Text of Hazard Statements and Precautionary Statements

Fatal if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause genetic defects. Suspected of causing cancer. May damage fertility or the unborn child. Causes damage to organs. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fumes. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves and eye protection. In case of inadequate ventilation wear respiratory protection.

IF SWALLOWED: Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed: Call a POISON CENTER or physician. Get medical attention if you feel unwell. Specific treatment (Wash areas of contact with water). Rinse mouth. If skin irritation occurs: Get medical attention. If experiencing respiratory symptoms: Call a POISON CENTER or physician. Take off contaminated clothing and wash it before reuse.

Store locked up.

Dispose of contents in accordance with local, state, federal and international regulations.

16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable.

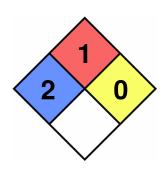
Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable.

Health Hazards Not Otherwise Classified (HHNOC): Not Applicable.

Not Applicable.

16.3. National Fire Protection Association (NFPA) Rating

Health: 2
Flammability: 1
Reactivity: 0
Special Hazard:



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16.4. Document Revision

Last Revision Date: 5/1/2015

DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and RICCA CHEMICAL COMPANY assumes no legal responsibility or liability whatsoever resulting from its use.

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