



# MATERIAL SAFETY DATA SHEET

## Section 1. Chemical Product and Company Identification

Catalog Number(s)

00653-06, 35655-06

Product Identity

ELECTRODE CLEANER

Manufacturer's Name

RICCA CHEMICAL COMPANY

Emergency Telephone Number (24 hr)

CHEMTREC®: 800-424-9300

Address (Number, Street, City, State, and ZIP Code)

P.O. Box 13090

Telephone Number For Information

817-461-5601

Arlington, Texas 76094

Date Prepared

4-20-2000

## Section 2. Composition / Information on Ingredients

Component	CAS Registry #	Percent Concentration	Exposure Limits	
			ACGIH TLV	OSHA PEL
Pepsin	9001-75-6	0.9 – 1.1	N/A	N/A
Hydrochloric Acid	7647-01-0	< 1	5 ppm	5 ppm
Water, Deionized	7732-18-5	Balance	N/A	N/A

## Section 3. Hazards Identification

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### EMERGENCY OVERVIEW

Does not present any significant health hazards. May cause irritation and allergic reaction. Wash areas of contact with water. If swallowed, give large amounts of water. Do not induce vomiting. Call a physician if necessary.

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### POTENTIAL HEALTH EFFECTS:

TARGET ORGANS: eyes, skin, respiratory system.

EYE CONTACT: May cause irritation, redness and pain.

INHALATION: May cause mild irritation.

SKIN CONTACT: May cause mild irritation and allergic reaction.

INGESTION: Large doses may cause nausea, vomiting and diarrhea.

### CHRONIC EFFECTS / CARCINOGENICITY:

IARC – Not classifiable as to carcinogenicity to humans (Hydrochloric Acid)

NTP – No

OSHA – No

### TERATOLOGY (BIRTH DEFECT) INFORMATION:

Mutation data cited in "Registry of Toxic Effects of Chemical Substances" for Hydrochloric Acid and Pepsin.

### REPRODUCTION INFORMATION:

Reproductive effects cited in "Registry of Toxic Effects of Chemical Substances" for Hydrochloric Acid.

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**Section 4. First Aid Measures – In all cases, seek qualified evaluation.**

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**EYE CONTACT:** Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops.

**INHALATION:** Remove to fresh air. Give artificial respiration if necessary.

**SKIN CONTACT:** Flush with plenty of soap and water for at least 15 minutes. Call a physician if irritation develops.

**INGESTION:** Dilute with water or milk. Do not induce vomiting. Call a physician if necessary.

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**Section 5. Fire Fighting Measures**

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**FLAMMABLE PROPERTIES:**

FLASH POINT: N/A

METHOD USED: N/A

**FLAMMABLE LIMITS**

LFL: N/A

UFL: N/A

**EXTINGUISHING MEDIA:** Use any means suitable for extinguishing surrounding fire (water, dry chemical, chemical foam).

**FIRE & EXPLOSION HAZARDS:** Not considered to be an explosion hazard.

**FIRE FIGHTING INSTRUCTIONS:** Use normal procedures/instructions.

**FIRE FIGHTING EQUIPMENT:** Use protective clothing and NIOSH-approved self-contained breathing apparatus appropriate for the surrounding fire.

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**Section 6. Accidental Release Measures**

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Cover the spill with Sodium Carbonate or a soda ash-slaked lime mixture (50:50). Mix and add water to form slurry. Decant the liquid to the drain with excess water. Treat the solid residue as normal refuse. Wash site with soda ash solution. Always dispose of in accordance with local regulations.

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**Section 7. Handling and Storage**

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As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Store in the refrigerator. SAFETY STORAGE CODE: GENERAL

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**Section 8. Exposure Controls / Personal Protection**

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**ENGINEERING CONTROLS:** No specific controls are needed. Normal room ventilation is adequate.

**RESPIRATORY PROTECTION:** Normal room ventilation is adequate.

**SKIN PROTECTION:** Chemical resistant gloves, Nitrile Rubber or Neoprene.

**EYE PROTECTION:** Safety glasses or goggles.

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**Section 9. Physical and chemical Properties**

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APPEARANCE:	Pale yellow liquid	pH:	Approximately 1
ODOR:	Odorless to slightly pungent	BOILING POINT (°C):	Approximately 100
SOLUBILITY IN WATER:	Infinite	MELTING POINT (°C):	Approximately 0
SPECIFIC GRAVITY:	Approximately 1	VAPOR PRESSURE:	N/A

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**Section 10. Stability and Reactivity**

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**CHEMICAL STABILITY:** Stable under normal conditions of use and storage.

**INCOMPATIBILITY:** Most metals, Alkalis, active metals, Cyanides, Sulfides, Sulfites, Metal Oxides, Formaldehyde, strong Oxidizers, salts of heavy metals, Tannins.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Fumes of Hydrogen Chloride and Hydrogen in contact with metals, Chlorine gas from Oxidizers. Carbon Monoxide, Carbon Dioxide and Nitrogen Oxides may be produced in a fire.

**HAZARDOUS POLYMERIZATION:** Will not occur.

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**Section 11. Toxicological Information**

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LD<sub>50</sub>, Oral, Rabbit (Hydrochloric Acid) 900 mg/kg; Details of toxic effects not reported other than lethal dose value. LCLo, inhalation, human: 3000 ppm/5 minutes: No toxic effects noted. Pepsin is investigated as a mutagen.

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**Section 12. Ecological Information**

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**ECOTOXICOLOGICAL INFORMATION:** Hydrogen Chloride has slight acute and chronic toxicity to aquatic life.

**CHEMICAL FATE INFORMATION:** Virtually 100% of Hydrogen Chloride will eventually end up in the air.

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**Section 13. Disposal Considerations**

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Cover the spill with Sodium Carbonate or a soda ash-slaked lime mixture (50:50). Mix and add water to form slurry. Decant the liquid to the drain with excess water. Treat the solid residue as normal refuse. Always dispose of in accordance with local, state and federal regulations.

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**Section 14. Transport Information (Not meant to be all inclusive)**

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D.O.T. SHIPPING NAME:	Not regulated
D.O.T. HAZARD CLASS:	None
U.N. / N.A. NUMBER:	None
PACKING GROUP:	None
D.O.T. LABEL:	None

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**Section 15. Regulatory Information (Not meant to be all inclusive - selected regulation represented)**

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**OSHA STATUS:** The above items either do not contain any specifically hazardous material or the potentially hazardous material is present in such low concentration that the items do not present any immediate threat to health and safety. These items do not meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

**TSCA STATUS:** All components of this solution are listed on the TSCA Inventory.

**CERCLA REPORTABLE QUANTITY:** Hydrochloric Acid RQ 5000 pounds

**SARA TITLE III:**

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: No

SECTION 311/312 HAZARDOUS CATEGORIES: Acute: Yes      Chronic, Fire, Pressure, Reactivity: No

SECTION 313 TOXIC CHEMICALS: No

**RCRA STATUS:** No

**CALIFORNIA PROPOSITION 65:** Not listed

**FLORIDA:** Hydrochloric Acid is listed on Florida's Toxic Substances List.

**PENNSYLVANIA:** Hydrochloric Acid is listed as an Environmental Hazard on the state's Hazardous Substances List.

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**Section 16. Other Information**

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<b>NFPA Ratings:</b>	<b>Health: 1</b>	<b>Flammability: 0</b>	<b>Reactivity: 0</b>	<b>Special Notice Key: None</b>
<b>HMIS® Ratings:</b>	<b>Health: 1</b>	<b>Flammability: 0</b>	<b>Reactivity: 0</b>	<b>Protective Equipment: B</b>
<b>(Protective eyewear, gloves)</b>				

Rev 1, 03-25-2003: Reviewed and approved, (Section 7) added refrigeration.

PRODUCT IDENTITY: ELECTRODE CLEANER  
EFFECTIVE DATE: 3-25-2003

MSDS NUMBER 00533 Rev 1

CATALOG NUMBER (S): 00653-06, 35655-06  
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## ***MATERIAL SAFETY DATA SHEET***

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.

**Health Hazard Information**

Acute- Swallowed	2-hydroxyethyl cellulose may cause faintness, convulsions, muscle spasms and blood abnormalities (methaemoglobinemia) if swallowed in large amounts.
Acute-Eye	May cause mild irritation
Acute-Skin	May cause irritation
Chronic	None known

**First Aid**

Swallowed	If conscious, drink large quantities of water, after which vomiting should be induced by a properly qualified person. Seek immediate medical assistance. Never give anything by mouth to an unconscious person.
Eye	Immediately flush with plenty of low pressure water for at least 15 minutes. Remove any contact lenses. Seek medical assistance.
Skin	Wash with soap and running water.

**Advice to Doctor**

Ingredient 2-hydroxy ethyl cellulose may cause methaemoglobinemia if systemically absorbed.

**Storage and Transport**

Storage Precautions	To protect product quality, store in sealed containers out of direct sunlight.
Handling	Avoid contact with eyes, skin or clothing. Wash thoroughly after handling and before eating, drinking or smoking.

**Spills and Disposal**

Spills	Sweep up spilled material. Flush spill area with water. Product is slippery.
Disposal	Dispose of in accordance with local, state and federal regulations.

**Other Information**

Toxicology	Ingredient: Hydroxyethyl cellulose: not a skin or eye irritant based on human patch tests. Oral administration of large doses in corn oil produced diarrhoea in rats. Ingredient: Indole butyric acid: LD50 (oral rat) 5000mg/kg. Not considered carcinogenic. Overexposure may cause irritation.
Biological Properties:	This product is biodegradable.
Packaging	50ml, 250ml, 1L, 5L, 25L

Published in accordance with Regulation 6 of the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994.

The information above is believed to be accurate and represents the best information currently available to us. It is the users obligation to evaluate and use this product safely and to comply with all relevant Federal, State and Local Government laws and regulations. Growth Technology Ltd shall not be responsible for loss, damage or injury resulting from reliance upon or failure to adhere to any recommendations or information contained herein, from abnormal use of the material, or from any hazard inherent in the nature of the material.