RICCA CHEMICAL COMPANY®

Safety Data Sheet

Classified According to OSHA Hazard Communication Standard (HCS 2024)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation HydroSpec® Coulometric AH
Anolyte Solution for Titration of Long-chain Hydrocarbons in Cells With or Without Diaphragm
Product Number RK120000
Other Identifying Product Numbers RK120000-1C, RK120000-500C

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 412 West Fork Drive

Arlington, TX 76012 USA

Telephone 888-467-4222

1.4. Emergency Telephone Number (24 hours)

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

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SECTION 2: Hazard(s) Identification

2.1. Classification of the Substance or Mixture

Hazard Class	Category	Hazard Statements	Precautionary Statements
Acute Toxicity - Oral	Category 3	H301	P264,P270,P301+P310,P321,P330, P405,P501
Acute Toxicity - Dermal	Category 3	H311	P280,P302+P352,P312,P321, P361+P364,P405,P501
Acute Toxicity - Inhalation (Vapors)	Category 3	H331	P261,P271,P304+P340,P311, P321,P403+P233,P405,P501
Flammable Liquids	Category 2	H225	P210,P233,P240,P241,P242,P243, P280,P303+P361+P353,P370+P378, P403+P235,P501
Skin Corrosion / Irritation	Category 1	H314	P260,P264,P280,P301+P330+P331, P303+P361+P353,P363,P304+P340, P310,P321,P305+P351+P338,P405, P501
Serious Eye Damage / Eye Irritation	Category 1	H318	P280,P305+P351+P338,P310
Germ Cell Mutagenicity	Category 2	H341	P201,P202,P280,P308+P313,P405, P501
Reproductive Toxicity	Category 1B	H360	P201,P202,P280,P308+P313,P405, P501
Specific Target Organ Toxicity - Single Exposure	Category 2	H371	P260,P264,P270,P308+P311, P405,P501
Specific Target Organ Toxicity - Single Exposure - Transient Effects	Category 3 - Narcotic Effects	H336	P261,P271,P304+P340,P312, P403+P233,P405,P501

2.2. GHS Label Elements

Pictograms:

Signal Word: **Danger**

Hazard Statements:

NOTE: Hazard statements may be combined on labels to improve clarity and readability.

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Hazard Number	Hazard Statement
H225	Highly flammable liquid and vapor
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled
H314	Causes severe skin burns and eye damage
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects
H360	May damage fertility or the unborn child
H371	May cause damage to organs

Precautionary Statements:

NOTE: Precautionary statements may be combined or consolidated on labels to improve clarity and readability.

Prevention

Precautionary Number	Precautionary Statement
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharge.
P260	Do not breathe fumes or mist.
P264	Wash hands, arms, and face thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves and eye protection.

Response

Precautionary Number	Precautionary Statement
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: 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.
P308+P311	If exposed or concerned: Call a poison center or doctor.
P330	Rinse mouth.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use dry chemical, foam, or carbon dioxide to extinguish.

Storage

Precautionary Number	Precautionary Statement
P403+P233+P235	Store in a well-ventilated place. Keep container tightly closed. Keep cool.
P405	Store locked up.

Disposal

Precautionary Number	Precautionary Statement
P501	Dispose of contents/container to suitable waste stream in accordance with local, state, federal, and international regulations.

2.3. Hazards not Otherwise Classified

No other hazards identified.

2.4. Ingredients of Unknown Acute Toxicity

5 percent of this mixture consists of ingredient(s) of unknown acute oral and inhalation toxicity. 10 percent of this mixture consists of ingredient(s) of unknown acute dermal toxicity.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
1-decanol	1-Decanol; Capric alcohol; n-Decyl alcohol	112-30-1	45.00
methanol	Methyl Alcohol	67-56-1	45.00
Sulfur dioxide	Sulfur Dioxide; Sulphurous anhydride	7446-09-5	5.00
1H-imidazole	Imidazole	288-32-4	5.00

SECTION 4: First-Aid Measures

4.1. Description of Necessary Measures

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.

Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor. Dilute immediately with water or milk. Induce vomiting. Call a physician.

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Results in drying and cracking which can lead to secondary infections and dermatitis. Dermal absorption causes many of the symptoms of inhalation.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Suspected of causing genetic defects Flammable liquid. Primarily toxic by ingestion. Cannot be made non-poisonous. If ingested, give large quantity of water and induce vomiting. Call a physician. Contact may cause dryness and cracking of the skin. May cause irritation to the eyes. Wash areas of contact with water. May cause irritation to the respiratory system. EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: Results in drying and cracking which can lead to secondary infections and dermatitis. Dermal absorption causes many of the symptoms of inhalation.

4.3. Immediate Medical Attention or Special Treatment Needed

Irrigate immediately with large quantity of water for at least 15 minutes. Call a physician if irritation develops. Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Wash areas of contact with soap and water for at least 15 minutes. Call a physician if irritation develops. Dilute immediately with water or milk. Induce vomiting. Call a physician.

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SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

In case of fire: Use dry chemical, foam, or carbon dioxide to extinguish. Water, dry chemical, foam, or carbon dioxide. Water spray may be used to keep fire-exposed containers cool.

5.2. Specific Hazards Arising from the Substance or Mixture in a Fire

Highly flammable liquid and vapor Moderate explosion hazard and dangerous fire hazard when exposed to heat, sparks and open flames. Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Sensitive to static discharge.

5.3. Special Protective Equipment and Precautions 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.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Ground and bond container and receiving equipment. Use explosion-proof equipment. Use non-sparking tools. Take action to prevent static discharge. Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Remove all sources of ignition. Contain spill. Do not flush to sewer. Absorb with suitable inert material (vermiculite, dry sand, etc) and place in a chemical waste container for proper disposal in an approved waste disposal facility. Ventilate area of spill. Have extinguishing agent available in case of fire. Use non-sparking tools and equipment. Dispose of in accordance with local regulations.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin. Protect from freezing and physical damage. Store in secure, flammable storage area away from all sources of ignition. Empty containers may be hazardous since they retain product residues.

SECTION 8: Exposure Controls / Personal Protection

8.1. Exposure Limits

U.S. OSHA - Permissible Exposure Limits (PEL) - Time Weighted Averages (TWA)

Chemical Name	CAS Number	Exposure Limit
Methyl Alcohol	67-56-1	200 ppm TWA; 260 mg/m3 TWA
Sulfur Dioxide	7446-09-5	5 ppm TWA; 13 mg/m3 TWA

U.S. OSHA - Permissible Exposure Limits (PEL) - Ceiling Limits

No limits found.

U.S. OSHA - Permissible Exposure Limits (PEL) - Short Term Exposure Limits (STEL)

No limits found.

U.S. OSHA - Specifically Regulated Chemicals

No limits found.

ACGIH - Threshold Limit Values - Ceilings (TLV-C)

No limits found.

ACGIH - Threshold Limit Values - Short Term Exposure Limits (TLV-STEL)

Chemical Name	CAS Number	Exposure Limit
Methyl Alcohol	67-56-1	250 ppm STEL
Sulfur Dioxide	7446-09-5	0.25 ppm STEL

ACGIH - Threshold Limit Values - Time Weighted Averages (TLV-TWA)

Chemical Name	CAS Number	Exposure Limit
Methyl Alcohol	67-56-1	200 ppm TWA

8.2. Engineering Controls

Use only outdoors or in a well-ventilated area. A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limit. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source. Use explosion proof equipment.

8.3. Individual Protective Measures and Personal Protective Equipment

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved atmosphere supplied respirator must be worn.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State:	Liquid
Color:	colorles to light yellow
Odor:	Data not available.
Odor Threshold:	Data not available.
Melting/Freezing Point:	Data not available.
Boiling Point/Range:	Data not available.
Flammability:	Data not available.
Flammability/Explosive Limits:	Data not available.
Flash Point:	Data not available.
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Data not available.
pH:	5.0-6.0 at 20°C
Kinematic Viscosity:	Data not available.
Solubility:	Data not available.
Vapor Pressure:	Data not available.
Evaporation Rate:	Data not available.
Relative Density:	0.93
Relative Vapor Density:	Data not available.
Particle Characteristics:	Data not available.
Partition Coefficient n-octanol/water, log	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

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Oxidizing agents, Alkali metals, Acid chlorides, Acid anhydrides, Reducing agents, Acids, heat sparks and open flame.

10.4. Hazardous Decomposition Products

Will not occur.Will not occur. May form carbon oxides, nitrogen oxides, sulfur oxides, hydrogen iodide, hydrogen cyanide (hydrocyanic acid) in the case of fire.

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SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Oral acute toxicity estimate (ATE): 215 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
1-Decanol	112-30-1	Oral LD50 Rat 4720 mg/kg (Source: NZ_CCID)
Imidazole	288-32-4	Oral LD50 Rat 970 mg/kg (Source: ECHA)
Methyl Alcohol	67-56-1	Oral LD50 Acute Toxicity Estimate 100 mg/kg (Source: ECHA)

Acute Toxicity - Dermal Exposure:

Dermal acute toxicity estimate (ATE): 666 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
1-Decanol	112-30-1	Dermal LD50 Rat >5000 mg/kg (no deaths occurred, Source: ECHA_API)
Methyl Alcohol	67-56-1	Dermal LD50 Acute Toxicity Estimate 300 mg/kg (Source: ECHA)

Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, gas): 25200.0000 ppmV, 4 h(calculated); Inhalation acute toxicity estimate (ATE, vapor): 6.6667 mg/L, 4 h(c

Chemical Name	CAS Number	Toxicity
1-Decanol	112-30-1	Inhalation LC50 Rat >71 mg/L 1 h (no deaths occurred, mist, Source: ECHA_API)
Methyl Alcohol	67-56-1	Inhalation LC50 Acute Toxicity Estimate 3 mg/L 4 h (Source: ECHA)
Sulfur Dioxide	7446-09-5	Inhalation LC50 Rat 1260 ppm 4 h (Source: Canada_WHMIS)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
Sulfur Dioxide	7446-09-5	Group 3 (Not Classified) - Monograph 54 [1992]

National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
	No data found.	

U.S. OSHA specifically regulated carcinogens

Chemical Name	CAS Number	Classification
	No data found.	

11.3 Additional Toxicology Information:

Toxic if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. May cause drowsiness or dizziness. Suspected of causing genetic defects. May damage fertility or the unborn child. May cause damage to organs.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
Methyl Alcohol	67-56-1	Earthworm	Acute	LC50 48 h Eisenia foetida >1 mg/cm2 [filter paper] (IUCLID)
1-Decanol	112-30-1	Freshwater Algae	Acute	"EC50 96 h Pseudokirchneriella subcapitata 2.7 mg/L (IUCLID)" As Alcohols, C6-12 [68603-15-6]; "EC50 96 h Pseudokirchneriella subcapitata 2.7 mg/L (IUCLID); EC50 96 h Desmodesmus subspicatus 6.2 mg/L (IUCLID)" As Alcohols, C9-11-branched and linear [85711-26-8]
Imidazole	288-32-4	Freshwater Algae	Acute	EC50 72 h Desmodesmus subspicatus 130 mg/L (IUCLID); EC50 96 h Desmodesmus subspicatus 82 mg/L (IUCLID)
1-Decanol	112-30-1	Freshwater Fish	Acute	LC50 96 h Pimephales promelas 2.2 - 2.5 mg/L [flow-through] (EPA); LC50 96 h Lepomis macrochirus 4.12 - 6.2 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss <5.6 mg/L [static] (EPA)
Methyl Alcohol	67-56-1	Freshwater Fish	Acute	LC50 96 h Pimephales promelas 28200 mg/L [flow-through] (EPA); LC50 96 h Pimephales promelas >100 mg/L [static] (EPA); LC50 96 h Oncorhynchus mykiss 19500 - 20700 mg/L [flow-through] (EPA); LC50 96 h Oncorhynchus mykiss 18 - 20 mL/L [static] (EPA); LC50 96 h Lepomis macrochirus 13500 - 17600 mg/L [flow-through] (EPA)
1-Decanol	112-30-1	Water Flea	Acute	EC50 48 h Daphnia magna 3 mg/L (IUCLID)
Imidazole	288-32-4	Water Flea	Acute	EC50 48 h Daphnia magna 341.5 mg/L (IUCLID)
1-Decanol	112-30-1	Water Flea	Chronic	NOEC 21 d Daphnia magna 110 µg/L [semi-static] (reproduction, ECHA_API)

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.

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SECTION 13: Disposal Considerations

13.1. Waste Treatment Methods

Data not available.

SECTION 14: Transportation Information

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

Sizes: 1 L, 6 L, 220 mL, 500 mL, 3000 mL

UN Number: UN1230

Proper Shipping Name: Methanol Solution

Hazard Class: 3

Packing Group: II

Hazard Label(s):

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

Sizes: 1 L, 6 L, 220 mL, 500 mL, 3000 mL

UN Number: UN1230

Proper Shipping Name: Methanol Solution

Hazard Class: 3 (6.1)

Packing Group: II

Hazard Label(s):

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14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 1 L, 6 L, 220 mL, 500 mL, 3000 mL

UN Number: UN1230

Proper Shipping Name: METHANOL SOLUTION

Hazard Class: 3

Packing Group: II

Hazard Label(s):

SECTION 15: Regulatory Information

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15.01. Occupational Safety and Health Administration (OSHA) Hazards

Chemical Name	CAS Number	Regulatory Information
		No data found.

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

Chemical Name	CAS Number	RQ	TPQ
Sulfur Dioxide	7446-09-5	500 lb TPQ	500 lb EPCRA RQ

15.03. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Chemical Name	CAS Number	Regulatory Information
Methyl Alcohol	67-56-1	5000 lb final RQ; 2270 kg final RQ

15.04. Superfund Amendments and Reauthorization Act (SARA) 313 Toxics Release Inventory (TRI)

Chemical Name	CAS Number	List	Regulatory Information
Methyl Alcohol	67-56-1	Emission Reporting	1.0 % de minimis concentration

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Methyl Alcohol	67-56-1	Present
Sulfur Dioxide	7446-09-5	Extraordinarily hazardous

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
1-Decanol	112-30-1	Present
Methyl Alcohol	67-56-1	Environmental hazard
Sulfur Dioxide	7446-09-5	Environmental hazard

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

Chemical Name	CAS Number	Regulatory Information
Methyl Alcohol	67-56-1	sn 1222
Sulfur Dioxide	7446-09-5	sn 1759

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
Methyl Alcohol	67-56-1	developmental toxicity, 3/16/2012
Sulfur Dioxide	7446-09-5	developmental toxicity, 7/29/2011

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

Chemical Name	CAS Number	List	Status
1-Decanol	112-30-1	DSL	Present
Imidazole	288-32-4	DSL	Present
Methyl Alcohol	67-56-1	DSL	Present
Methyl Alcohol	67-56-1	NDSL	"Present" As Alcohols, C1-3 [68475-56-9]
Sulfur Dioxide	7446-09-5	DSL	Present

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

Chemical Name	CAS Number	Status
1-Decanol	112-30-1	Present (ACTIVE)
Imidazole	288-32-4	Present (ACTIVE)
Methyl Alcohol	67-56-1	Present (ACTIVE)
Sulfur Dioxide	7446-09-5	Present (ACTIVE)

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

Chemical Name	CAS Number	List	Number
1-Decanol	112-30-1	EINECS	203-956-9
Imidazole	288-32-4	EINECS	206-019-2
Methyl Alcohol	67-56-1	EINECS	200-659-6
Sulfur Dioxide	7446-09-5	EINECS	231-195-2

15.12. China - Inventory of Existing chemical Substances (IECSC)

Chemical Name	CAS Number	Status
1-Decanol	112-30-1	Present [41399]
Imidazole	288-32-4	Present [24933]
Methyl Alcohol	67-56-1	Present [16735]
Sulfur Dioxide	7446-09-5	Present [11370]

15.13. Korea - Existing Chemicals Inventory (KECI/KECL)

Chemical Name	CAS Number	List	Status
1-Decanol	112-30-1	Annex 1	Present [KE-09483]
Imidazole	288-32-4	Annex 1	Present [KE-20937]
Methyl Alcohol	67-56-1	Annex 1	Present [KE-23193]
Sulfur Dioxide	7446-09-5	Annex 1	Present [KE-32567]

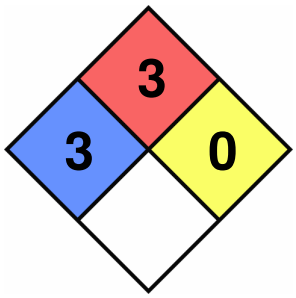
15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
1-Decanol	112-30-1	(2)-217
Imidazole	288-32-4	(5)-381
Methyl Alcohol	67-56-1	(2)-201
Sulfur Dioxide	7446-09-5	(1)-536

SECTION 16: Other Information

16.1 National Fire Protection Associate (NFPA) Rating

Health: 3
Flammability: 3
Reactivity 0
Special Hazard:



16.2 Document Revision

Last Revision Date:
2026-05-24

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.