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® Solvent K
Medium for One and Two Component Volumetric Titrations of Aldehydes and Ketones
Product Number RK340000
Other Identifying Product Numbers RK340000-1C

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
Flammable Liquids	Category 3	H226	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
Carcinogenicity	Category 2	H351	P201,P202,P280,P308+P313,P405, P501
Reproductive Toxicity	Category 2	H361	P201,P202,P280,P308+P313,P405, P501
Specific Target Organ Toxicity - Single Exposure - Transient Effects	Category 3 - Narcotic Effects	H336	P261,P271,P304+P340,P312, P403+P233,P405,P501
Specific Target Organ Toxicity - Repeated Exposure	Category 1	H372	P260,P264,P270,P314,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.

Hazard Number	Hazard Statement
H226	Flammable liquid and vapor
H314	Causes severe skin burns and eye damage
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to heart, kidneys, liver through prolonged or repeated exposure

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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+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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+P313	If exposed or concerned: Get medical advice or attention.
P310	Immediately call a poison center or doctor.
P363	Wash contaminated clothing 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

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

SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
1-methoxypropan-2-ol	Propylene Glycol Monomethyl Ether; 1-methoxy-2-propanol; methoxyisopropanol, PGME	107-98-2	83.00
chloroform	Chloroform; Trichloromethane	67-66-3	11.00
Sulfur dioxide	Sulfur Dioxide; Sulphurous anhydride	7446-09-5	6.00

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: Rinse mouth. Do NOT induce vomiting. Dilute immediately with water or milk. Do not induce vomiting. Call a physician if necessary.

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. May irritate skin. May cause allergic skin reaction. May be harmful if absorbed through skin.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Suspected of damaging fertility or the unborn child EYE CONTACT: May cause irritation with burning and stinging with possible damage to the cornea and conjunctiva. SKIN CONTACT: May cause irritation, allergic rash. Absorption is possible.

4.3. Immediate Medical Attention or Special Treatment Needed

Immediately call a poison center or doctor. Irrigate immediately with large quantity of water for at least 15 minutes. Remove to fresh air. If breathing is difficult, give oxygen. Wash areas of contact with soap and water for at least 15 minutes. Dilute immediately with water or milk. Do not induce vomiting. Call a physician if necessary.

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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. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Flammable liquid and vapor Flammable in the presence of a source of ignition when the temperature is above the flash point. May form peroxides of unknown stability.

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. 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. Moisture sensitive, keep container tightly closed.

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
Sulfur Dioxide	7446-09-5	5 ppm TWA; 13 mg/m3 TWA

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

Chemical Name	CAS Number	Exposure Limit
Chloroform	67-66-3	50 ppm Ceiling; 240 mg/m3 Ceiling

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
Propylene Glycol Monomethyl Ether	107-98-2	100 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
Propylene Glycol Monomethyl Ether	107-98-2	50 ppm TWA
Chloroform	67-66-3	10 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.

8.3. Individual Protective Measures and Personal Protective Equipment

Respiratory Protection: Normal room ventilation is adequate. If the exposure limit is exceeded, a full facepiece respirator with organic vapor cartridge may 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:	Colorless to light yellow
Odor:	Data not available.
Odor Threshold:	Data not available.
Melting/Freezing Point:	Data not available.
Boiling Point/Range:	120°C at 1013hPa (760mmHg)
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:	1.12
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. Strong oxidizing agents, alkali metals, acid chlorides, acid anhydrides, reducing agents, acids, heat, sparks, open flames, extremes of temperature and direct sunlight.

10.4. Hazardous Decomposition Products

Will not occur. May form carbon oxides and sulfur oxides in the case of fire.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Not acutely toxic.

Chemical Name	CAS Number	Toxicity
Propylene Glycol Monomethyl Ether	107-98-2	Oral LD50 Rat 5000 mg/kg (Source: JAPAN_GHS)
Chloroform	67-66-3	Oral LD50 Rat 908 mg/kg (males, Source: ECHA_API); Oral LD50 Rat 1117 mg/kg (females, Source: ECHA_API)

Acute Toxicity - Dermal Exposure:

No information found.

Chemical Name	CAS Number	Toxicity
Propylene Glycol Monomethyl Ether	107-98-2	Dermal LD50 Rabbit 13 g/kg (Source: NLM_CIP)
Chloroform	67-66-3	Dermal LD50 Rabbit >20 g/kg (Source: NLM_CIP)

Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, gas): 21000.0000 ppmV, 4 h(calculated); Inhalation acute toxicity estimate (ATE, vapor): 95.4545 mg/L, 4 h(

Chemical Name	CAS Number	Toxicity
Propylene Glycol Monomethyl Ether	107-98-2	Inhalation LC50 Rat >7559 ppm 6 h (no deaths occurred, vapor, Source: OECD_SIDS)
Chloroform	67-66-3	Inhalation LC50 Rat 10.5 mg/L 4 h (vapor, Source: ECHA_API)
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
Chloroform	67-66-3	Group 2B (Possibly Carcinogenic to Humans) - Monograph 73 [1999]
Sulfur Dioxide	7446-09-5	Group 3 (Not Classified) - Monograph 54 [1992]

National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
Chloroform	67-66-3	Reasonably Anticipated To Be A Human Carcinogen; Male Rat - Clear Evidence; Female Rat - No Evidence; Male Mice - Clear Evidence; Female Mice - Clear Evidence (TR-000)

U.S. OSHA specifically regulated carcinogens

Chemical Name	CAS Number	Classification
	No data found.	

11.3 Additional Toxicology Information:

Causes severe skin burns and eye damage. May cause drowsiness or dizziness. Suspected of causing genetic defects. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to heart, kidneys, liver through prolonged or repeated exposure.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
Propylene Glycol Monomethyl Ether	107-98-2	Freshwater Fish	Acute	LC50 96 h Pimephales promelas 20.8 g/L [static] (IUCLID)
Chloroform	67-66-3	Freshwater Fish	Acute	LC50 96 h Pimephales promelas 71 mg/L [flow-through] (IUCLID); LC50 96 h Oncorhynchus mykiss 18 mg/L [flow-through] (IUCLID); LC50 96 h Lepomis macrochirus 18 mg/L [flow-through] (IUCLID); LC50 96 h Poecilia reticulata 300 mg/L [static] (IUCLID)
Propylene Glycol Monomethyl Ether	107-98-2	Water Flea	Acute	EC50 48 h Daphnia magna 23300 mg/L (IUCLID)
Chloroform	67-66-3	Water Flea	Acute	EC50 48 h Daphnia magna 29 mg/L (IUCLID)

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: UN3092

Proper Shipping Name: 1-Methoxy-2-propanol solution

Hazard Class: 3

Packing Group: III

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: UN3092

Proper Shipping Name: 1-Methoxy-2-propanol solution

Hazard Class: 3

Packing Group: III

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: UN3092

Proper Shipping Name: 1-METHOXY-2-PROPANOL SOLUTION

Hazard Class: 3

Packing Group: III

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
Chloroform	67-66-3	10000 lb TPQ	10 lb EPCRA RQ
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
Chloroform	67-66-3	10 lb final RQ; 4.54 kg final RQ

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

Chemical Name	CAS Number	List	Regulatory Information
Chloroform	67-66-3	Emission Reporting	0.1 % de minimis concentration

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Propylene Glycol Monomethyl Ether	107-98-2	Present
Chloroform	67-66-3	Carcinogen; Extraordinarily hazardous
Sulfur Dioxide	7446-09-5	Extraordinarily hazardous

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Propylene Glycol Monomethyl Ether	107-98-2	Present
Chloroform	67-66-3	Environmental hazard; Special hazardous substance
Sulfur Dioxide	7446-09-5	Environmental hazard

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

Chemical Name	CAS Number	Regulatory Information
Propylene Glycol Monomethyl Ether	107-98-2	sn 1613
Chloroform	67-66-3	sn 0388
Sulfur Dioxide	7446-09-5	sn 1759

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
Chloroform	67-66-3	carcinogen, 10/1/1987
Chloroform	67-66-3	developmental toxicity, 8/7/2009
Chloroform	67-66-3	20 µg/day NSRL (oral); 40 µg/day NSRL (inhalation)
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
Propylene Glycol Monomethyl Ether	107-98-2	DSL	Present
Chloroform	67-66-3	DSL	Present
Sulfur Dioxide	7446-09-5	DSL	Present

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

Chemical Name	CAS Number	Status
Propylene Glycol Monomethyl Ether	107-98-2	Present (ACTIVE)
Chloroform	67-66-3	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
Propylene Glycol Monomethyl Ether	107-98-2	EINECS	203-539-1
Chloroform	67-66-3	EINECS	200-663-8
Sulfur Dioxide	7446-09-5	EINECS	231-195-2

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

Chemical Name	CAS Number	Status
Propylene Glycol Monomethyl Ether	107-98-2	Present [20425]
Chloroform	67-66-3	Present [23977]
Sulfur Dioxide	7446-09-5	Present [11370]

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

Chemical Name	CAS Number	List	Status
Propylene Glycol Monomethyl Ether	107-98-2	Annex 1	Present [KE-23379]
Chloroform	67-66-3	Annex 1	Present [KE-34076]
Sulfur Dioxide	7446-09-5	Annex 1	Present [KE-32567]

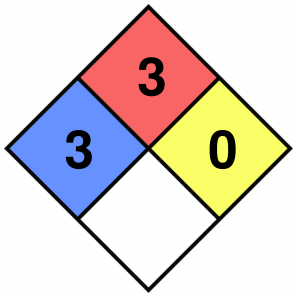
15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Propylene Glycol Monomethyl Ether	107-98-2	(2)-404, (7)-97
Chloroform	67-66-3	(2)-37
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:



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16.2 Document Revision

Last Revision Date:
2026-05-23

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.