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 Acetic Anhydride ACS

Product Number RSOA0050

Other Identifying Product Numbers RSOA0050-4C, RSOA0050-500C

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 4	H302	P264,P270,P301+P312,P330,P501
Acute Toxicity - Inhalation (Vapors)	Category 3	H331	P261,P271,P304+P340,P311, P321,P403+P233,P405,P501
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

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
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H331	Toxic if inhaled

Precautionary Statements:

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

Prevention

Precautionary Number	Precautionary Statement
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+P312	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
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.
P310	Immediately call a poison center or doctor.
P330	Rinse mouth.
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

SECTION 3: Composition / Information on Ingredients

3.1. Components of Substance

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
acetyl acetate	Acetic Anhydride; acetanhydride; ethanoic anhydride; acetyl oxide	108-24-7	100.00

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.

Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

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.

4.2. Most Important Symptoms and Effects, Acute and Delayed

Toxic if inhaled

4.3. Immediate Medical Attention or Special Treatment Needed

Immediately call a poison center or doctor.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

In case of fire: Use dry chemical, foam, or carbon dioxide to extinguish.

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

Flammable liquid and vapor

5.3. Special Protective Equipment and Precautions for Firefighters

Wear protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

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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

Absorb with suitable material and 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.

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
Acetic Anhydride	108-24-7	5 ppm TWA; 20 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
Acetic Anhydride	108-24-7	3 ppm STEL

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

Chemical Name	CAS Number	Exposure Limit
Acetic Anhydride	108-24-7	1 ppm TWA

8.2. Engineering Controls

Use only outdoors or in a well-ventilated area.

8.3. Individual Protective Measures and Personal Protective Equipment

Respiratory Protection: Wear protective gloves and eye protection.

Skin Protection: Wear protective gloves and eye protection.

Eye Protection: Wear protective gloves and eye protection.

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SECTION 9: Physical and Chemical Properties

9.1. Basic Physical and Chemical Properties

Physical State:	Liquid
Color:	clear, colorless
Odor:	Data not available.
Odor Threshold:	Data not available.
Melting/Freezing Point:	-74°C
Boiling Point/Range:	Data not available.
Flammability:	Data not available.
Flammability/Explosive Limits:	Data not available.
Flash Point:	49 °C closed cup (ECHA_API)
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Data not available.
pH:	Data not available.
Kinematic Viscosity:	Data not available.
Solubility:	miscible
Vapor Pressure:	0.46 (butyl acetate = 1)
Evaporation Rate:	0.46 (butyl acetate = 1)
Relative Density:	1.08
Relative Vapor Density:	3.5
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.

10.4. Hazardous Decomposition Products

None identified.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Oral acute toxicity estimate (ATE): 500 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Acetic Anhydride	108-24-7	Oral LD50 Acute Toxicity Estimate 500 mg/kg (Source: Canada_WHMIS)

Acute Toxicity - Dermal Exposure:

Dermal acute toxicity estimate (ATE): 4000 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Acetic Anhydride	108-24-7	Dermal LD50 Rabbit 4000 mg/kg (Source: JAPAN_GHS)

Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, vapor): 4.2000 mg/L, 4 h(calculated)

Chemical Name	CAS Number	Toxicity
Acetic Anhydride	108-24-7	Inhalation LC50 Rat 4.2 - 8.5 mg/L 4 h (vapor, Source: ECHA_API)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
	No data found.	

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:

Harmful if swallowed. Causes severe skin burns and eye damage. Toxic if inhaled.

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SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
	No data found.	None	None	

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.

SECTION 14: Transportation Information

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

Sizes: 4 L, 500 mL

UN Number: UN1715

Proper Shipping Name: Acetic Anhydride

Hazard Class: 8 (3)

Packing Group: II

Hazard Label(s):

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

Sizes: 4 L, 500 mL

UN Number: UN1715

Proper Shipping Name: Acetic Anhydride

Hazard Class: 8 (3)

Packing Group: II

Hazard Label(s):

14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 4 L, 500 mL

UN Number: UN1715

Proper Shipping Name: ACETIC ANHYDRIDE

Hazard Class: 8 (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
		No data found.

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

Chemical Name	CAS Number	Regulatory Information
Acetic Anhydride	108-24-7	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
		No data found.

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Acetic Anhydride	108-24-7	Present

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Acetic Anhydride	108-24-7	Environmental hazard

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

Chemical Name	CAS Number	Regulatory Information
Acetic Anhydride	108-24-7	sn 0005

15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
		No data found.

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

Chemical Name	CAS Number	List	Status
Acetic Anhydride	108-24-7	DSL	Present

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

Chemical Name	CAS Number	Status
Acetic Anhydride	108-24-7	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
Acetic Anhydride	108-24-7	EINECS	203-564-8

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

Chemical Name	CAS Number	Status
Acetic Anhydride	108-24-7	Present [05312]

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

Chemical Name	CAS Number	List	Status
Acetic Anhydride	108-24-7	Annex 1	Present [KE-00017]

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

Chemical Name	CAS Number	MITI No.
Acetic Anhydride	108-24-7	(2)-690

SECTION 16: Other Information

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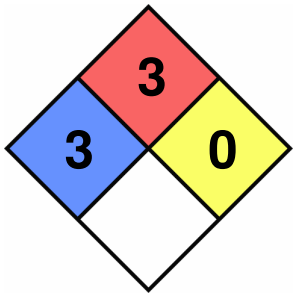
16.1 National Fire Protection Associate (NFPA) Rating

Health:	3
Flammability:	3
Reactivity	0
Special Hazard:	



16.2 Document Revision

Last Revision Date:
2026-05-04

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.