RICCA CHEMICAL COMPANY®

Safety Data Sheet

Classified According to Canada Hazardous Product Regulations SOR/2015-17 (HPR 2022)

SECTION 1: Identification

1.1. Product Identifier

Trade Name or Designation Cyclohexanone / Methylene Chloride, 1 + 1

Product Number R2544010
Other Identifying Product Numbers R2544010-1C

1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent
After February 3, 2025, this chemical substance (as defined in TSCA section 3(2))/product cannot be distributed in commerce to retailers. After January 28, 2026, this chemical substance (as defined in TSCA section 3(2))/product is and can only be distributed in commerce or processed with a concentration of methylene chloride equal to or greater than 0.1% by weight for the following purposes: (1) Processing as a reactant; (2) Processing for incorporation into a formulation, mixture, or reaction product; (3) Processing for repackaging; (4) Processing for recycling; (5) Industrial or commercial use as a laboratory chemical; (6) Industrial or commercial use as a bonding agent for solvent welding; (7) Industrial and commercial use as a paint and coating remover from safety critical, corrosion-sensitive components of aircraft and spacecraft; (8) Industrial and commercial use as a processing aid; (9) Industrial and commercial use for plastic and rubber products manufacturing; (10) Industrial and commercial use as a solvent that becomes part of a formulation or mixture, where that formulation or mixture will be used inside a manufacturing process, and the solvent (methylene chloride) will be reclaimed; (11) Industrial and commercial use in the refinishing for wooden furniture, decorative pieces, and architectural fixtures of artistic, cultural or historic value until May 8, 2029; (12) Industrial and commercial use in adhesives and sealants in aircraft, space vehicle, and turbine applications for structural and safety critical non-structural applications until May 8, 2029; (13) Disposal; and (14) Export.

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

1.5. Distributor Address

Ricca Chemical Company
412 West Fork Drive
Arlington, TX 76012 USA

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SECTION 2: Hazard Identification

2.1. Classification of the Hazardous Product

Hazard Class	Category	Hazard Statements	Precautionary Statements
Acute Toxicity - Oral	Category 4	H302	P264,P270,P301+P312,P330,P501
Flammable Liquids	Category 4	H227	P210,P280,P370+P378,P403,P501
Skin Corrosion / Irritation	Category 2	H315	P264,P280,P302+P352,P321, P332+P313,P362+P364
Serious Eye Damage / Eye Irritation	Category 2	H319	P264,P280,P305+P351+P338, P337+P313
Carcinogenicity	Category 1B	H350	P201,P202,P280,P308+P313,P405, P501
Specific Target Organ Toxicity - Single Exposure - Transient Effects	Category 3 - Respiratory Irritation and Narcotic Effects	H335,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.

Hazard Number	Hazard Statement
H227	Combustible liquid
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H350	May cause cancer

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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.
P261	Avoid breathing 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.
P302+P352	IF ON SKIN: Wash with plenty of water.
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.
P312	Call a poison center or doctor if you feel unwell.
P330	Rinse mouth.
P332+P313	If skin irritation occurs: Get medical advice or attention.
P337+P313	If eye irritation persists: Get medical advice or attention.
P362+P364	Take off 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	Store in a well-ventilated place.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
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

This product does not contain any ingredients of unknown acute toxicity.

SECTION 3: Composition / Information on Ingredients

3.1. Components of Mixture

Chemical Name (IUPAC)	Common Name and Synonyms	CAS Number	Weight%
dichloromethane	Methylene Chloride	75-09-2	58.33
cyclohexanone	Cyclohexanone; cyclohexyl ketone; sextone	108-94-1	41.67

SECTION 4: First-Aid Measures

4.1. Description of Necessary First-Aid 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: Call a POISON CENTER or doctor if you feel unwell. 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: Wash with plenty of water. Results in drying and cracking which can lead to secondary infections and dermatitis.

4.2. Most Important Symptoms and Effects, Acute and Delayed

May cause respiratory irritation DANGER! Flammable and Toxic. Contains a suspected carcinogen. Keep away from heat, sparks, and open flames. Use with adequate ventilation. Avoid prolonged breathing of vapor or contact with skin. Harmful if swallowed. Do not pipet by mouth. If ingested, give large quantity of water and induce vomiting. Call a physician. Wash areas of contact with plenty of water for 15 minutes. For eyes, get medical attention. 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.

4.3. Immediate Medical Attention or Special Treatment Needed

Irrigate immediately with large quantity of water for at least 15 minutes. Get medical attention immediately. 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. Dry chemical, foam, carbon dioxide Use extinguishing media appropriate for surrounding fire.

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

Combustible liquid No flash point in conventional closed tester, but forms flammable vapor-air mixtures in larger volumes and may be an explosion hazard in a confined space. Combustion may produce irritants and toxic gases. Combustion by-products include hydrogen chloride and phosgene.

5.3. Special Protective Equipment and Precautions for Firefighters

Wear full protective clothing and positive pressure self-contained breathing apparatus. Polyvinyl chloride barrier recommended.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

6.2. Cleanup and Containment Methods and Materials

Stop or control the leak, if this can be done without undue risk. Control runoff and isolate discharged material for proper disposal.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling and Storage Conditions

Store in a well-ventilated place. Store in a well-ventilated place. Keep container tightly closed. 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
Cyclohexanone	108-94-1	50 ppm TWA; 200 mg/m3 TWA
Methylene Chloride	75-09-2	25 ppm 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)

Chemical Name	CAS Number	Exposure Limit
Methylene Chloride	75-09-2	125 ppm STEL (see 29 CFR 1910.1052)

U.S. OSHA - Specifically Regulated Chemicals

Chemical Name	CAS Number	Exposure Limit
Methylene Chloride	75-09-2	12.5 ppm Action Level (See 29 CFR 1910.1052); 25 ppm TWA; 125 ppm STEL (15 min)

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
Cyclohexanone	108-94-1	50 ppm STEL

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

Chemical Name	CAS Number	Exposure Limit
Cyclohexanone	108-94-1	20 ppm TWA
Methylene Chloride	75-09-2	50 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: If the TLV is exceeded, a full-face chemical cartridge respirator may be worn up to 50 times the TLV or the maximum use concentration specified by the respirator supplier, whichever is less.

Skin Protection: Chemical resistant gloves.

Eye Protection: Safety glasses or goggles.

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SECTION 9: Physical and Chemical Properties

9.1. Physical and Chemical Properties

Physical State:	liquid
Color:	Colorless or pale 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. - 9.4% (Cyclohexanone), 23% (Methylene Chloride)
Flash Point:	68 °C (calculated)
Auto-Ignition Temperature:	Data not available.
Decomposition Temperature:	Data not available.
pH:	Data not available.
Kinematic Viscosity:	Data not available.
Solubility:	Data not available.
Vapor Pressure:	Data not available.
Evaporation Rate:	Data not available.
Relative Density:	1.14
Relative Vapor Density:	Data not available.
Particle Characteristics:	Data not available.
Partition Coefficient n-octanol/water, log	Data not available.

NOTE: Flash point was calculated according to the method of Gmehling and Rasmussen (Ind. Eng. Chem. Fundament, 21, 186, (1982)), as allowed by GHS Rev 7, section 2.6.4.2.3.

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 oxidizers (permanganates, peroxides, nitrates, chlorates and perchlorates). Can react with Nitric Acid to form violently explosive materials. Produces explosive peroxides when mixed with Hydrogen Peroxide.

10.4. Hazardous Decomposition Products

Will not occur.

SECTION 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity - Oral Exposure:

Oral acute toxicity estimate (ATE): 1576 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Cyclohexanone	108-94-1	Oral LD50 Rat 1544 mg/kg (Source: JAPAN_GHS)
Methylene Chloride	75-09-2	Oral LD50 Rat 1600 mg/kg (Source: JAPAN_GHS)

Acute Toxicity - Dermal Exposure:

Dermal acute toxicity estimate (ATE): 2272 mg/kg(calculated)

Chemical Name	CAS Number	Toxicity
Cyclohexanone	108-94-1	Dermal LD50 Rabbit 947 mg/kg (Source: JAPAN_GHS)
Methylene Chloride	75-09-2	Dermal LD50 Rat >2000 mg/kg (Source: ECHA_API)

Acute Toxicity - Inhalation Exposure:

Inhalation acute toxicity estimate (ATE, vapor): 25.4380 mg/L, 4 h(calculated)

Chemical Name	CAS Number	Toxicity
Cyclohexanone	108-94-1	Inhalation LC50 Rat 10.6 mg/L 4 h (Source: Canada_WHMIS)
Methylene Chloride	75-09-2	Inhalation LC50 Rat 53 mg/L 6 h (vapor, Source: JAPAN_GHS)

11.2 Carcinogenicity:

International Agency for Research on Cancer (IARC)

Chemical Name	CAS Number	Classification
Cyclohexanone	108-94-1	Group 3 (Not Classified) - Monograph 71 [1999]; Monograph 47 [1989]
Methylene Chloride	75-09-2	Group 2A (Probably Carcinogenic to Humans) - Monograph 110 [2017]; Monograph 71 [1999]

National Toxicology Program (NTP)

Chemical Name	CAS Number	Classification
Methylene Chloride	75-09-2	Reasonably Anticipated To Be A Human Carcinogen; Male Rat - Some Evidence; Female Rat - Clear Evidence; Male Mice - Clear Evidence; Female Mice - Clear Evidence (TR-306)

U.S. OSHA specifically regulated carcinogens

Chemical Name	CAS Number	Classification
Methylene Chloride	75-09-2	see 29 CFR 1910.1052

11.3 Additional Toxicology Information:

Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May cause cancer.

SECTION 12: Ecological Information

12.1. Ecotoxicity

Chemical Name	CAS Number	Species	Exposure	Toxicity
Methylene Chloride	75-09-2	Earthworm	Acute	LC50 48 h Eisenia foetida 0.3 mg/cm2 [filter paper] (IUCLID); LC50 48 h Eisenia foetida 304 mg/cm2 [filter paper] (IUCLID)
Methylene Chloride	75-09-2	Freshwater Algae	Acute	EC50 96 h Pseudokirchneriella subcapitata >500 mg/L (EPA); EC50 72 h Pseudokirchneriella subcapitata >500 mg/L (EPA)
Cyclohexanone	108-94-1	Freshwater Fish	Acute	LC50 96 h Pimephales promelas 481 - 578 mg/L [flow-through] (EPA)
Methylene Chloride	75-09-2	Freshwater Fish	Acute	LC50 96 h Pimephales promelas 140.8 - 277.8 mg/L [flow-through] (EPA); LC50 96 h Pimephales promelas 262 - 855 mg/L [static] (EPA); LC50 96 h Lepomis macrochirus 193 mg/L [static] (IUCLID); LC50 96 h Lepomis macrochirus 193 mg/L [flow-through] (IUCLID)
Methylene Chloride	75-09-2	Water Flea	Acute	EC50 48 h Daphnia magna 1532 - 1847 mg/L [Static] (EPA); EC50 48 h Daphnia magna 190 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.

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

UN Number: UN1992

Proper Shipping Name: Flammable liquid, toxic, n.o.s. (Cyclohexanone, Dichloromethane)

Hazard Class: 3 (6.1)

Packing Group: III

Hazard Label(s):

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

Sizes: 1 L

UN Number: UN1992

Proper Shipping Name: Flammable liquid, toxic, n.o.s. (Cyclohexanone, Dichloromethane)

Hazard Class: 3 (6.1)

Packing Group: III

Hazard Label(s):

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14.3 Transportation of Dangerous Goods (TDG, Canada)

Sizes: 1 L

UN Number: UN1992

Proper Shipping Name: FLAMMABLE LIQUID, TOXIC, N.O.S. (cyclohexanone, dichloromethane)

Hazard Class: 3 (6.1)

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
Methylene Chloride	75-09-2	125 ppm STEL (See 29 CFR 1910.1052, 15 min); 12.5 ppm Action Level (See 29 CFR 1910.1052); 25 ppm TWA (See 29 CFR 1910.1052)

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
Cyclohexanone	108-94-1	5000 lb final RQ; 2270 kg final RQ
Methylene Chloride	75-09-2	1000 lb final RQ; 454 kg final RQ

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

Chemical Name	CAS Number	List	Regulatory Information
Methylene Chloride	75-09-2	Emission Reporting	0.1 % de minimis concentration

15.05. Massachusetts Right-to-Know Substance List

Chemical Name	CAS Number	Regulatory Information
Cyclohexanone	108-94-1	Present
Methylene Chloride	75-09-2	Carcinogen; Extraordinarily hazardous

15.06. Pennsylvania Right-to-Know Hazardous Substances

Chemical Name	CAS Number	Regulatory Information
Cyclohexanone	108-94-1	Environmental hazard
Methylene Chloride	75-09-2	Environmental hazard; Special hazardous substance

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

Chemical Name	CAS Number	Regulatory Information
Cyclohexanone	108-94-1	sn 0570
Methylene Chloride	75-09-2	sn 1255

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15.08. California Proposition 65

Chemical Name	CAS Number	Regulatory Information
Methylene Chloride	75-09-2	carcinogen, 4/1/1988
Methylene Chloride	75-09-2	200 µg/day NSRL (inhalation); 50 µg/day NSRL

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

Chemical Name	CAS Number	List	Status
Cyclohexanone	108-94-1	DSL	Present
Methylene Chloride	75-09-2	DSL	Present

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

Chemical Name	CAS Number	Status
Cyclohexanone	108-94-1	Present (ACTIVE)
Methylene Chloride	75-09-2	Present [R] (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
Cyclohexanone	108-94-1	EINECS	203-631-1
Methylene Chloride	75-09-2	EINECS	200-838-9

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

Chemical Name	CAS Number	Status
Cyclohexanone	108-94-1	Present [14652]
Methylene Chloride	75-09-2	Present [09775]

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

Chemical Name	CAS Number	List	Status
Cyclohexanone	108-94-1	Annex 1	Present [KE-09188]
Methylene Chloride	75-09-2	Annex 1	Present [KE-23893]

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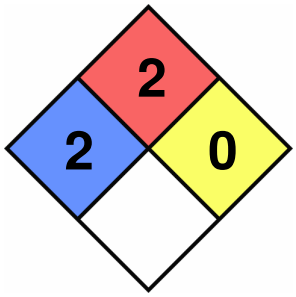
15.14. Japan - Existing and New Chemical Substances Inventory (ENCS)

Chemical Name	CAS Number	MITI No.
Cyclohexanone	108-94-1	(3)-2376
Methylene Chloride	75-09-2	(2)-36

SECTION 16: Other Information

16.1 National Fire Protection Associate (NFPA) Rating

Health: 2
Flammability: 2
Reactivity 0
Special Hazard:



16.2 Document Revision

Last Revision Date:
2026-05-05

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.