

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

### 1.1. Product Identifier

**Product Form:** Substance

**Product Name:** 1-methylcyclopropanecarbaldehyde

**CAS No:** 4515-89-3

**Product Code:** VOLO10108

**Standard InChI:** InChI=1S/C5H8O/c1-5(4-6)2-3-5/h4H,2-3H2,1H3

### 1.2. Intended Use of the Product

**Use of the substance/mixture:** For laboratory research purposes

### 1.3. Name, Address, and Telephone of the Responsible Party

**Manufacturer**

T 510.748.0159

Volochem, Inc.

[www.volochem.com](http://www.volochem.com)

2600 Hilltop Dr.

Bldg B #C211

Richmond, CA 94806

### 1.4. Emergency Telephone Number

**Emergency Number** : 510.748.0150 (9a to 5p PST)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

**Classification (GHS-US)**

Flammable liquids (Category 2)

### 2.2. Label Elements

**GHS-US Labeling**

**Pictogram(s):** GHS02



**Signal word:** Danger

**Hazard statement(s)**

H225 Highly flammable liquid and vapor.

**Precautionary statement(s)**

P210 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P303+P361+P353 IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water or shower.

P370+P378 In case of fire: Use alcohol-resistant foam, dry chemical, or carbon dioxide to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

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No additional information available

### 2.4. Unknown Acute Toxicity (GHS-US)

100% of the product consists of ingredient(s) of unknown acute toxicity.

Handle in accordance with prudent practices for working with hazardous chemicals.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Name	Synonym(s)	Product Identifiers
1-methylcyclopropanecarbaldehyde	None	VOLO10108 CAS No. 4515-89-3

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur, go into open air and ventilate suspected area.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

**Symptoms/Injuries After Inhalation:** Overexposure may be irritating to the respiratory system.

**Symptoms/Injuries After Skin Contact:** May cause skin irritation. Exposure may produce an allergic reaction.

**Symptoms/Injuries After Eye Contact:** May cause eye irritation. May cause serious damage to eyes.

**Symptoms/Injuries After Ingestion:** May be harmful if swallowed.

**Chronic Symptoms:** The chronic effects of this substance are unknown.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Use alcohol-resistant foam, dry chemical, or carbon dioxide.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Flammable liquid. During combustion may emit: carbon oxides.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Firefighting Instructions:** Exercise caution when fighting any chemical fire.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

### 5.4. NFPA Rating

Health Hazard:	1
Flammability:	3
Reactivity Hazard:	0

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### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

##### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

##### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area.

#### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

#### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain and collect as any solid.

**Methods for Cleaning Up:** Collect spillage. Avoid generation of dust during clean-up of spills. Clear up spills immediately and dispose of waste safely.

#### 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

### SECTION 7: HANDLING AND STORAGE

#### 7.1. Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

#### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry and well-ventilated place at 2-8 °C. Keep container closed when not in use.

**Incompatible Products:** Strong acids. Strong bases. Strong oxidizers.

#### 7.3. Specific End Use(s) For laboratory research purposes

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

#### 8.2. Exposure Controls

##### Appropriate Engineering Controls

: Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Avoid high vapor concentration. Ensure adequate ventilation, especially in confined areas.

##### Personal Protective Equipment

: Gloves. Protective goggles. Insufficient ventilation: wear respiratory protection.



##### Hand Protection

: Wear chemically resistant protective gloves.

##### Eye Protection

: Chemical goggles or safety glasses.

##### Respiratory Protection

: Use NIOSH-approved vapor mask if working in a poorly ventilated area..

##### Other Information

: When using, do not eat, drink or smoke.

This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear liquid
Odor	: No data available
Odor Threshold	: No data available
pH	: No data available
Relative Evaporation Rate (butylacetate=1)	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: 57 °C/117 mmHg(lit.)
Flash Point	: ESTIMATE ca 10 °C
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity	: Not available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, Kinematic	: No data available
Viscosity, Dynamic	: No data available
Explosive Properties	: No data available
Oxidizing Properties	: No data available
Explosive Limits	: Not applicable

9.2. Other Information No additional information available

### SECTION 10: STABILITY AND REACTIVITY

- 10.1. **Reactivity** Hazardous reactions will not occur under normal conditions.
- 10.2. **Chemical Stability** Product is stable under recommended storage conditions.
- 10.3. **Possibility of Hazardous Reactions** Hazardous polymerization will not occur.
- 10.4. **Conditions to Avoid** Direct sunlight. Extremely high or low temperatures.
- 10.5. **Incompatible Materials** Strong acids. Strong bases. Strong oxidizers.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1. Information on Toxicological Effects

**Acute Toxicity:** Not classified

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

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**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Overexposure may be irritating to the respiratory system.

**Symptoms/Injuries After Skin Contact:** May cause skin irritation. Exposure may produce an allergic reaction.

**Symptoms/Injuries After Eye Contact:** May cause eye irritation. May cause serious damage to eyes.

**Symptoms/Injuries After Ingestion:** May be harmful if swallowed.

**Chronic Symptoms:** The chronic effects of this substance are unknown.

## SECTION 12: ECOLOGICAL INFORMATION

**12.1. Toxicity** No additional information available

**12.2. Persistence and Degradability**

**Persistence and Degradability** Not established

**12.3. Bioaccumulative Potential**

**Bioaccumulative Potential** Not established

**12.4. Mobility in Soil** No additional information available

**12.5. Other Adverse Effects**

**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods**

**Waste Disposal Recommendations:** Contact a licensed professional waste disposal service to dispose of this material. Dispose of waste material in accordance with all local, regional, national, and international regulations.

## SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/IMDG/DOT

<b>14.1. UN Number</b>	1989
<b>14.2. UN Proper Shipping Name</b>	Aldehydes, n.o.s. (1-methylcyclopropanecarbaldehyde)
<b>14.3. Transport hazard class(es)</b>	3
<b>14.4. Packing group</b>	II
<b>14.5.1. Marine Pollutant</b>	No
<b>14.5.2. Reportable Quantity</b>	No
<b>14.6.1. Toxic Inhalation Hazard</b>	No
<b>14.6.2. Mode specific comments</b>	No comments
<b>14.6.2.1 Ground transportation - DOT (US)</b>	None
<b>14.6.2.2 Marine transportation - IMDG</b>	None
<b>14.6.2.3 Air transportation - IATA/ICAO</b>	None

## SECTION 15: REGULATORY INFORMATION

**15.1. US Federal Regulations**

**EPA TSCA Inventory**

Not listed

For research and development use only be technically qualified individuals under section 5(h)(3) of the Toxic Substances Control Act (TSCA).

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Components

Fire Hazard

### 15.2. US State Regulations

#### California Proposition 65 List 2014

Not listed

#### Maine Chemicals of High Concern List 2012

Not listed

#### Massachusetts Right to Know Hazardous Substance List 2014

Not listed

#### New Jersey Right to Know Hazardous Substance List 2010

Not listed

#### Pennsylvania Right to Know Hazardous Substance List 2010

Not listed

## SECTION 16: OTHER INFORMATION

### 16.1. Other Classifications

#### HMIS

Health hazard: 1

Flammability: 3

Physical hazards: 0

Revision date : 1/3/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

*Volochem chemicals are for research purposes only and are NOT intended for use as drugs, food additives, household goods, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.*

SDS US (GHS HazCom) - US Only