

# SAFETY DATA SHEET

Revision Date 24-December-2021 Creation Date 23-February-2012 **Revision Number 4** 

1. Identification

**Product Name** Cyclopropyl methyl ketone

Cat No.: AC111710000; AC111710250; AC111711000; AC111715000

**CAS-No** 

**Synonyms** Acetylcyclopropane

**Recommended Use** Laboratory chemicals.

Food, drug, pesticide or biocidal product use. Uses advised against

Details of the supplier of the safety data sheet

Company

Manufacturer Importer/Distributor

Acros Organics Fisher Scientific Company Fisher Scientific One Reagent Lane 112 Colonnade Road. One Reagent Lane Fair Lawn, NJ 07410 Fair Lawn, NJ 07410 Ottawa, ON K2E 7L6, Tel: (201) 796-7100

Canada

Tel: 1-800-234-7437

**Emergency Telephone Number** For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11

Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No.US:001-800-424-9300 / Europe:001-703-527-3887

# 2. Hazard(s) identification

Classification

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Flammable liquids Category 2 Acute oral toxicity Category 3 Skin Corrosion/Irritation Category 2 Category 2 Serious Eye Damage/Eye Irritation

**Label Elements** 

Signal Word

Danger

**Hazard Statements** 

Highly flammable liquid and vapor Toxic if swallowed Causes skin irritation

#### Causes serious eye irritation



### **Precautionary Statements**

### Prevention

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

Keep container tightly closed

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting/equipment

Use only non-sparking tools

Take precautionary measures against static discharges

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

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

#### Response

IF SWALLOWED: Immediately call a POISON CENTER/doctor

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Rinse mouth

If skin irritation occurs: Get medical advice/attention If eye irritation persists: Get medical advice/attention

Wash contaminated clothing before reuse

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

### **Storage**

Store locked up

Store in a well-ventilated place. Keep cool

# Disposal

Dispose of contents/container to an approved waste disposal plant

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %	
Cyclopropyl methyl ketone	765-43-5	>95	

## 4. First-aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required. Keep eye wide open while rinsing.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Call a physician

immediately.

**Inhalation** Remove from exposure, lie down. Do not use mouth-to-mouth method if victim ingested or

inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician immediately. If

not breathing, give artificial respiration.

**Ingestion** Clean mouth with water. Do NOT induce vomiting. Never give anything by mouth to an

unconscious person. Call a physician immediately.

Most important symptoms/effects Difficulty in breathing. Causes burns by all exposure routes. Inhalation of high vapor

concentrations may cause symptoms like headache, dizziness, tiredness, nausea and

vomiting: Product is a corrosive material. Use of gastric lavage or emesis is

contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of

perforation

Notes to Physician Treat symptomatically

# 5. Fire-fighting measures

Suitable Extinguishing Media CO<sub>2</sub>, dry chemical, dry sand, alcohol-resistant foam. Water mist may be used to cool

closed containers.

Unsuitable Extinguishing Media No information available

Flash Point 21 °C / 69.8 °F

Method - No information available

Autoignition Temperature 450 °C / 842 °F

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

### **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes. Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Thermal decomposition can lead to release of irritating gases and vapors.

## **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

N	F	Р	Α

Health	Flammability	Instability	Physical hazards
3	3	0	N/A

# 6. Accidental release measures

Personal Precautions

Use personal protective equipment as required. Evacuate personnel to safe areas. Keep

people away from and upwind of spill/leak. Ensure adequate ventilation. Remove all

sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions Should not be released into the environment. See Section 12 for additional Ecological

Information.

**Methods for Containment and Clean** Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. **Up**Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## 7. Handling and storage

Handling

Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

Storage.

Keep away from heat, sparks and flame. Flammables area. Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Incompatible Materials. Strong oxidizing agents. Strong bases. Reducing Agent.

# 8. Exposure controls / personal protection

**Exposure Guidelines** 

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### **Engineering Measures**

Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

## Personal protective equipment

**Eye Protection** Goggles Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	Glove comments
Natural rubber	See manufacturers	-	Splash protection only
Nitrile rubber	recommendations		
Neoprene			
PVC			

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

### **Respiratory Protection**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly **Recommended Filter type:** Organic gases and vapours filter Type A Brown conforming to EN14387

When RPE is used a face piece Fit Test should be conducted

### **Environmental exposure controls**

No information available.

### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

	9. Physical and chemical properties
Physical State	Liquid
Appearance	Clear
Odor	Strong

Odor Threshold<br/>pHNo information availableNo information available

Melting Point/Range-68 °C / -90.4 °FBoiling Point/Range111 °C / 231.8 °F @ 760 mmHg

Flash Point 21 °C / 69.8 °F
Evaporation Rate No information available

Flammability (solid,gas)

Not applicable

Flammability or explosive limits

Upper<br/>LowerNo data available<br/>No data availableVapor Pressure112 hPa @ 50 °CVapor Density2.91 (Air = 1.0)

Specific Gravity 0.898

Solubility

No information available
Partition coefficient; n-octanol/water

Autoignition Temperature

No data available
450 °C / 842 °F

Decomposition Temperature > 200°C

Viscosity 0.65 mPa.s at 20 °C

Molecular FormulaC5 H8 OMolecular Weight84.12

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition.

Incompatible Materials Strong oxidizing agents, Strong bases, Reducing Agent

Hazardous Decomposition Products Carbon monoxide (CO<sub>2</sub>), Carbon dioxide (CO<sub>2</sub>), Thermal decomposition can lead to release

of irritating gases and vapors

Hazardous Polymerization Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

# 11. Toxicological information

### **Acute Toxicity**

## **Product Information**

**Component Information** 

Component		LD50 Oral	LD50 Dermal	LC50 Inhalation	
Cyclopropyl methyl ketone >2000 mg/kg (Rat)		LD50 > 2000 mg/kg (Rat)	Not listed		

Toxicologically Synergistic No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

 Irritation
 No information available

 Sensitization
 No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Cyclopropyl methyl	765-43-5	Not listed				
ketone						

Mutagenic Effects No information available

Reproductive Effects No information available.

**Developmental Effects**No information available.

**Teratogenicity** No information available.

STOT - single exposure None known STOT - repeated exposure None known

**Aspiration hazard** No information available

Symptoms / effects,both acute and Inhalation of high vapor concentrations may cause symptoms like headache, dizziness,

delayed

tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and

danger of perforation

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

# 12. Ecological information

### **Ecotoxicity**

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Do not empty into drains.

Persistence and Degradability Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Cyclopropyl methyl ketone	0.49

# 13. Disposal considerations

**Waste Disposal Methods** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

# 14. Transport information

DOT

**UN-No** UN1992

Proper Shipping Name consumer commodity
Technical Name Cyclopropyl methyl ketone

Hazard Class 3
Subsidiary Hazard Class 6.1
Packing Group II

TDG

UN-No UN1992
Hazard Class 3
Subsidiary Hazard Class 6.1
Packing Group ||

<u>IATA</u>

UN-No UN2924

**Proper Shipping Name** Flammable liquid, corrosive, n.o.s.

Hazard Class

Subsidiary Hazard Class 8
Packing Group | |

IMDG/IMO

UN-No UN2924

Proper Shipping Name Flammable liquid, corrosive, n.o.s. Hazard Class 3

Subsidiary Hazard Class 8
Packing Group | |

# 15. Regulatory information

### **International Inventories**

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Cyclopropyl methyl ketone	765-43-5	-	-	-	•	212-146-4	•	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Cyclopropyl methyl ketone	765-43-5	Х	-	-	Х	Х	Х	Х	X

### Legend:

X - Listed '-' - Not Listed

KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

### Canada

SDS in compliance with provisions of information as set out in Canadian Standard - Part 4, Schedule 1 and 2 of the Hazardous Products Regulations (HPR) and meets the requirements of the HPR (Paragraph 13(1)(a) of the Hazardous Products Act (HPA)).

## Other International Regulations

# Authorisation/Restrictions according to EU REACH

### Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	CAS-No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Cyclopropyl methyl ketone	765-43-5	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities	Seveso III Directive (2012/18/EC) - Qualifying Quantities	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)

Component	CAS-No	Seveso III Directive	Seveso III Directive	Rotterdam	Basel Convention
		(2012/18/EC) - (2012/18/EC) -		Convention (PIC)	(Hazardous Waste)
		Qualifying Quantities	Qualifying Quantities		
		for Major Accident	for Safety Report		
		Notification	Requirements		
Cyclopropyl methyl ketone	765-43-5	Not applicable	Not applicable	Not applicable	Not applicable

# 16. Other information

Prepared By Regulatory Affairs

Revision Date 24-December-2021

## Cyclopropyl methyl ketone

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Creation Date23-February-2012Revision Date24-December-2021Print Date24-December-2021

**Revision Summary**This document has been updated to comply with the requirements of WHMIS 2015 to align

with the Globally Harmonised System (GHS) for the Classification and Labelling of

Chemicals.

### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**