

# SAFETY DATA SHEET

Creation Date 12-September-2014 Revision Date 25-December-2021 **Revision Number 4** 

1. Identification

**Product Name** Methylenecyclohexane

AC325510000; AC325510010; AC325510050 Cat No.:

Synonyms No information available

**Recommended Use** Laboratory chemicals.

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

Details of the supplier of the safety data sheet

Company

Importer/Distributor Acros Organics Fisher Scientific One Reagent Lane 112 Colonnade Road,

Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

Manufacturer

Fisher Scientific Company One Reagent Lane Fair Lawn, NJ 07410

Tel: (201) 796-7100

**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)

Fair Lawn, NJ 07410

Flammable liquids Category 2

**Label Elements** 

Signal Word

Danger

**Hazard Statements** 

Highly flammable liquid and vapor



#### **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

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

#### Response

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

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

Explosion risk in case of fire

Fight fire with normal precautions from a reasonable distance

Evacuate area

#### **Storage**

Store in a well-ventilated place. Keep cool

#### **Disposal**

Dispose of contents/container to an approved incineration plant

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Cyclohexane, methylene-	1192-37-6	98

### 4. First-aid measures

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

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.

Inhalation Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial

respiration. Get medical attention.

**Ingestion** Do NOT induce vomiting. Get medical attention.

Most important symptoms/effects Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like

headache, dizziness, tiredness, nausea and vomiting

Notes to Physician Treat symptomatically

### 5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam. Water mist may be used

to cool closed containers.

Unsuitable Extinguishing Media No information available

**Flash Point** -6 °C / 21.2 °F

Method -No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

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

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

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**

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.

NFPA

Health **Flammability** Instability Physical hazards 1 3 0 N/A

# Accidental release measures

**Personal Precautions Environmental Precautions**  Remove all sources of ignition. Take precautionary measures against static discharges. See Section 12 for additional Ecological Information.

Up

Methods for Containment and Clean Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

## 7. Handling and storage

Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Keep away from open flames, hot surfaces and sources of ignition. 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 in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Refrigerator/flammables. Keep container tightly closed in a dry and well-ventilated place. Incompatible Materials. Strong oxidizing agents.

### 8. Exposure controls / personal protection

**Exposure Guidelines** 

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

#### **Engineering Measures**

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

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** Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Hand Protection Protective gloves

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

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**

No protective equipment is needed under normal use conditions.

#### **Environmental exposure controls**

No information available.

#### **Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

# 9. Physical and chemical properties

Physical StateLiquidAppearanceColorlessOdorsweet

Odor ThresholdNo information availablepHNo information availableMelting Point/RangeNo data available

Boiling Point/Range 102 - 103 °C / 215.6 - 217.4 °F @ 760 mmHg

Flash Point -6 °C / 21.2 °F
Evaporation Rate No information available

Flammability (solid,gas) Not applicable

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information availableVapor DensityNo information available

Specific Gravity 0.800

Solubility

No information available

Partition coefficient; n-octanol/water

No data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNo information available

Molecular FormulaC7 H12Molecular Weight96.17

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

### Methylenecyclohexane

Stability Stable under normal conditions, heat sensitive.

**Conditions to Avoid** Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

**Incompatible Materials** Strong oxidizing agents

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors

No information available. **Hazardous Polymerization** 

**Hazardous Reactions** None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

No acute toxicity information is available for this product

**Component Information** 

**Toxicologically Synergistic** 

No information available

**Products** 

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

No information available Irritation

Sensitization No information available

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Cyclohexane,	1192-37-6	Not listed				
methylene-						

No information available **Mutagenic Effects** 

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

delayed

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

tiredness, nausea and vomiting

**Endocrine Disruptor Information** No information available

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

# 12. Ecological information

**Ecotoxicity** 

Do not empty into drains.

No information available Persistence and Degradability

**Bioaccumulation/ Accumulation** No information available.

**Mobility** No information available.

# 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** UN1993

Proper Shipping Name Flammable liquid, n.o.s.
Technical Name Methylenecyclohexane

Hazard Class 3 Packing Group II

TDG

UN-No UN1993

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

Hazard Class 3
Packing Group ||

<u>IATA</u>

**UN-No** UN1993

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

Hazard Class 3 Packing Group II

IMDG/IMO

UN-No UN1993

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

Hazard Class 3 Packing Group II

# 15. Regulatory information

#### **International Inventories**

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
Cyclohexane, methylene-	1192-37-6	ı	X	X	ACTIVE	214-752-4	-	-

	Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
ı	Cyclohexane, methylene-	1192-37-6	-	KE-23895	-	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

Not applicable

Cyclohexane, methylene-

### 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)
Cyclohexane, methylene-	1192-37-6	Not applicable	Not applicable	Not applicable	Not applicable
Component	CAS-No	Seveso III Directive (2012/18/EC) -	Seveso III Directive (2012/18/EC) -	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
		Qualifying Quantities for Major Accident	Qualifying Quantities for Safety Report	!	

16. Other information		16. Other information	
-----------------------	--	-----------------------	--

Prepared By Regulatory Affairs

1192-37-6

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Not applicable

Creation Date12-September-2014Revision Date25-December-2021Print Date25-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

Not applicable

Not applicable

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**