

# **SAFETY DATA SHEET**

Revision Date 25-December-2021 Revision Number 5

1. Identification

Product Name Methyl-(S)-3-(tert-butoxycarbonyl)-2,2-dimethyl-4-oxazolidinecarboxyl

ate

Cat No.: AC301260000; AC301260010; AC301260025; AC301260050

Synonyms 2,2-Dimethyl oxazolidine-3,4-dicarboxylic acid 3-tert-butyl ester 4-methyl ester

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 Manufacturer

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

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

Skin Corrosion/Irritation

Serious Eye Damage/Eye Irritation

Specific target organ toxicity (single exposure)

Category 2

Category 2

Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word Warning

**Hazard Statements** 

Combustible liquid
Causes skin irritation

# Methyl-(S)-3-(tert-butoxycarbonyl)-2,2-dimethyl-4-oxaz olidinecarboxylate

•

Causes serious eye irritation May cause respiratory irritation



## **Precautionary Statements**

#### Prevention

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

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Use only outdoors or in a well-ventilated area

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

#### Response

IF ON SKIN: Wash with plenty of soap and water

IF INHALED: Remove person to fresh air and keep comfortable for breathing

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Call a POISON CENTER/ doctor if you feel unwell

Take off contaminated clothing

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

#### Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
(S)-(-)-3-tert-Butoxycarbonyl-4-methoxycarbonyl-2,2	108149-60-6	93
-dimethyl-1,3-oxazolidine		

#### 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 soap and plenty of water while removing all contaminated

clothes and shoes. Get medical attention.

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

respiration. Get medical attention.

**Ingestion** Clean mouth with water. Get medical attention.

Most important symptoms/effects Difficulty in breathing. Symptoms of overexposure may be 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

92 °C / 197.6 °F **Flash Point** 

Method -No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

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**

Combustible material. Flammable. Containers may explode when heated.

#### **Hazardous Combustion Products**

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO2).

## **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
2	1	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. Do not let this chemical enter the environment. Remove all sources of ignition.

## 7. Handling and storage

Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Do not ingest. If Handling

swallowed then seek immediate medical assistance. Keep away from open flames, hot

surfaces and sources of ignition.

Storage. Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away

from heat, sparks and flame. Keep containers tightly closed in a dry, cool 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.

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
Nitrile rubber	See manufacturers	-	Splash protection only
Neoprene	recommendations		
Natural rubber			
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**

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 State Liquid Appearance Yellow

Odor No information available
Odor Threshold No information available
pH No information available
Melting Point/Range No data available

**Boiling Point/Range** 101 - 102 °C / 213.8 - 215.6 °F @ 2 mmHg

Flash Point 92 °C / 197.6 °F
Evaporation Rate No information available

Flammability (solid,gas)

Not applicable

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information available

Vapor Density 8.94 Specific Gravity 1.082

Solubility
No information available
Partition coefficient; n-octanol/water
No data available

Autoignition TemperatureNo information availableDecomposition TemperatureNo information availableViscosityNo information available

Molecular Formula C12 H21 N O5

Molecular Weight 259.31

## 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

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

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

**Hazardous Polymerization**No information available.

**Hazardous Reactions** None under normal processing.

# 11. Toxicological information

**Acute Toxicity** 

Product Information No acute toxicity information is available for this product

Oral LD50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Dermal LD50

Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Vapor LC50

Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

**Component Information** 

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
(S)-(-)-3-tert-Butoxycar	108149-60-6	Not listed				
bonyl-4-methoxycarbo						
nyl-2,2-dimethyl-1,3-ox						
azolidine						

Mutagenic Effects No information available

Reproductive Effects No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

STOT - single exposure Respiratory system STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

delayed

**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.

Persistence and Degradability No information available

**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** COMBUSTIBLE LIQUID, NOT REGULATED FOR TRANSPORT IN THIS QUANTITY

According to 49 CFR §173.150(f)(1), this material should reclassified as NA1993,

Combustible Liquid, NOS if it is shipped in bulk.

UN-No NA1993

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

Packing Group

TDG Not regulated Not regulated Not regulated Not regulated Not regulated

# 15. Regulatory information

#### **International Inventories**

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive	EINECS	ELINCS	NLP
(S)-(-)-3-tert-Butoxycarbonyl-4-met	108149-60-6	-	-	-	=	-	-	-
hoxycarbonyl-2,2-dimethyl-1,3-oxa								
zolidine								

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
(S)-(-)-3-tert-Butoxycarbonyl-4-met		-	-	-	-	Х	-	-	-
hoxycarbonyl-2,2-dimethyl-1,3-oxa									
zolidine									

#### 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)
(S)-(-)-3-tert-Butoxycarbonyl-4 -methoxycarbonyl-2,2-dimethy l-1,3-oxazolidine		Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS-No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
(S)-(-)-3-tert-Butoxycarbonyl-4 -methoxycarbonyl-2,2-dimethy l-1,3-oxazolidine		Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

Revision Date 25-December-2021 Print Date 25-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**