

# **SAFETY DATA SHEET**

Creation Date 10-Feb-2011 Revision Date 24-Dec-2021 Revision Number 5

1. Identification

Product Name Methyl laurate

Cat No.: AC215560000; AC215560025; AC215560100; AC215560500;

AC215562500

**CAS No** 111-82-0

Synonyms Lauric acid methyl ester; Methyl dodecanoate

Recommended Use Laboratory chemicals.

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

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company Acros Organics
One Reagent Lane One Reagent Lane
Fair Lawn, NJ 07410 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

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

### Label Elements

None required

#### Hazards not otherwise classified (HNOC)

Very toxic to aquatic life

Toxic to aquatic life with long lasting effects

# 3. Composition/Information on Ingredients

Component	CAS No	Weight %
Dodecanoic acid, methyl ester	111-82-0	>95

### 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

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. If skin irritation persists,

call a physician.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and

effects

None reasonably foreseeable.

Notes to Physician Treat symptomatically

### 5. Fire-fighting measures

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

Unsuitable Extinguishing Media No information available

Flash Point  $> 110 \, ^{\circ}\text{C} \, / > 230 \, ^{\circ}\text{F}$ 

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**

Do not allow run-off from fire-fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

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

HealthFlammabilityInstabilityPhysical hazards00N/A

### 6. Accidental release measures

Personal Precautions
Environmental Precautions

Ensure adequate ventilation. Use personal protective equipment as required.

Use personal protective equipment as required.

Do not flush into surface water or sanitary sewer system. Do not allow material to

contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**Methods for Containment and Clean** Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. **Up** 

7. Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not

get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

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

Materials. Strong oxidizing agents. Strong bases.

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** None under normal use conditions.

Personal Protective Equipment

**Eye/face 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.

**Skin and body protection**Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**No protective equipment is needed under normal use conditions.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical StateLiquidAppearanceLight yellowOdorfatty odor

Odor Threshold

pH

No information available
No information available

Melting Point/Range 4 - 5 °C / 39.2 - 41 °F

Boiling Point/Range 261 °C / 501.8 °F @ 760 mmHg

Flash Point  $> 110 \, ^{\circ}\text{C} \, / > 230 \, ^{\circ}\text{F}$  Evaporation Rate  $> 100 \, ^{\circ}\text{C} \, / > 230 \, ^{\circ}\text{F}$ 

Flammability (solid,gas) Not applicable

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information availableVapor DensityNo information available

Specific Gravity 0.870

Solubility Insoluble in water
Partition coefficient; n-octanol/water No data available
Autoignition Temperature No information available

Decomposition Temperature

Viscosity

No information available
No information available

Molecular Formula C13 H26 O2
Molecular Weight 214.35

## 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents, Strong bases

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

**Hazardous Polymerization** No information available.

Hazardous Reactions None under normal processing.

### 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

**Component Information** 

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation		
Dodecanoic acid, methyl ester	> 2000 mg/kg (Rat)	Not listed	LC50 > 5 mg/L (Rat) 4 h		

**Toxicologically Synergistic** 

**Products** 

No information available

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

IrritationNo information availableSensitizationNo 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
D	odecanoic acid,	111-82-0	Not listed				
	methyl ester						

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 No information available

delayed

**Endocrine Disruptor Information** No information available

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

12. Ecological information

Ecotoxicity

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Dodecanoic acid, methyl	EC50: = 1.5 mg/L, 96h	LC50: > 1000 mg/L, 96h	Not listed	EC50: 0.255 mg/L/48h
ester	(Desmodesmus subspicatus)	static (Lepomis macrochirus)		

Persistence and Degradability

May persist

**Bioaccumulation/ Accumulation** 

No information available.

Mobility

. Is not likely mobile in the environment due its low water solubility.

Component	log Pow
Dodecanoic acid, methyl ester	6.02

### 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 UN3082

Proper Shipping Name Environmentally hazardous substances, liquid, n.o.s.

Technical Name Dodecanoic acid, methyl ester

Hazard Class 9
Packing Group III

TDG

UN-No UN3082

**Proper Shipping Name** Environmentally hazardous substances, liquid, n.o.s.

Hazard Class 9
Packing Group III

**IATA** 

UN-No UN3082

Proper Shipping Name Environmentally hazardous substances, liquid, n.o.s.

Hazard Class 9
Packing Group III

IMDG/IMO

UN-No UN3082

Proper Shipping Name Environmentally hazardous substances, liquid, n.o.s.

Hazard Class 9
Packing Group III

15. Regulatory information

### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Dodecanoic acid, methyl ester	111-82-0	X	ACTIVE	-

#### Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

#### **International Inventories**

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Dodecanoic acid, methyl ester	111-82-0	Х	-	203-911-3	Х	Χ	Х	Х	Х	KE-12876

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

#### U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

**U.S. Department of Transportation** 

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland

Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

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)
Dodecanoic acid, methyl ester	111-82-0	Listed	Not applicable	Not applicable	Not applicable

Component	CAS No	, , ,	(2012/18/EC) - (2012/18/EC) - Qualifying Quantities		Basel Convention (Hazardous Waste)
		for Major Accident Notification	for Safety Report Requirements		
Dodecanoic acid, methyl ester	111-82-0	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

 Creation Date
 10-Feb-2011

 Revision Date
 24-Dec-2021

 Print Date
 24-Dec-2021

Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

#### **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**