

# Lauric acid

## Safety Data Sheet

**629375**

Version: 2.1

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Date of issue: 14/01/2015      Revision date 27/11/2019  
Supersedes 08/03/2017

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance  
Substance name : Lauric acid  
EC-No. : 205-582-1  
CAS-No. : 143-07-7  
Product code : 629375  
Formula : C12H24O2  
Product group : Raw material

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Main use category : Pharmaceutical  
Industrial/Professional use spec : For professional use only  
Industrial

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Duchefa Farma BV  
A. Hofmanweg 71  
2031BH Haarlem - Nederland  
T +31(0)23-5319093  
[farma@duchefa.nl](mailto:farma@duchefa.nl) - [www.duchefa-farma.com](http://www.duchefa-farma.com)

#### 1.4. Emergency telephone number

Emergency number : Supplier contact information:  
+31(0)23-5319093 (M-F 09:00-17:00)  
+31(0)6-30109355 (outside office hours)

Organisation/Company	Address	Comment
Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 2      H319

Full text of H statements : see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]** Extra labelling to display Extra classification(s) to display

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning

Hazard statements (CLP) : H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P280 - Wear eye protection, face protection, protective clothing, protective gloves.  
P305+P351 - IF IN EYES: Rinse cautiously with water for several minutes.  
P337+P313 - If eye irritation persists: Get medical advice/attention.

### 2.3. Other hazards

Other hazards not contributing to the classification : No additional information available.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lauric acid	(CAS-No.) 143-07-7 (EC-No.) 205-582-1	≈ 100	Eye Irrit. 2, H319

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## 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 : Allow affected person to breathe fresh air  
Allow the victim to rest.

First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects after eye contact	: Causes serious eye irritation.
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#### 4.3. Indication of any immediate medical attention and special treatment needed

Unknown.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Foam Dry powder Carbon dioxide.
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#### 5.2. Special hazards arising from the substance or mixture

Explosion hazard	: Risk of dust explosion.
Hazardous decomposition products in case of fire	: Hazardous combustible gases and vapors.

#### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures	: Evacuate unnecessary personnel.
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##### 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 : Sweeping or shovelling without dust for disposal.  
Methods for cleaning up : Hose down area with water.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures.  
Hygiene measures : Wash hands immediately after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.  
Store in dry, well-ventilated area.  
Incompatible products : Strong bases. Strong acids.  
Incompatible materials : Sources of ignition. Direct sunlight.  
Storage temperature : 15 - 25 °C  
Special rules on packaging : Keep only in original container.

### 7.3. Specific end use(s)

Pharmaceutical industry.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>Lauric acid (143-07-7)</b>	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	≈

### 8.2. Exposure controls

#### Appropriate engineering controls:

Technical measures and appropriate working operations should have priority over the use of personal protective equipment.

#### Personal protective equipment:

Dust/aerosol mask with filter type P1. Safety glasses. Gloves.

#### Hand protection:

Type	Material	Permeation	Thickness (mm)	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11	EN ISO 374

#### Eye protection:

Safety glasses (to European standard EN 166 or equivalent)

#### Skin and body protection:

Protective clothing (with elasticated cuffs and closed neck)

### Respiratory protection:

Dustmask with filtertype P1



## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Molecular mass	: 200.32 g/mol
Colour	: white to slightly yellow.
Odour	: weak. Characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 43 - 45 °C
Freezing point	: No data available
Boiling point	: 299 °C (1.013 hPa)
Flash point	: 176 °C
Auto-ignition temperature	: > 250 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: 0.15 hPa (100 °C)
Relative vapour density at 20 °C	: 6.91
Relative density	: No data available
Relative density of saturated gas/air mixture	: 6.91
Density	: 0.883 g/cm <sup>3</sup>
Solubility	: Poorly soluble in water. Water: 0.0048 g/l @ 20 °C
Log Pow	: 4.6
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 7 mPa·s
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 0.6 vol %

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Forms at very high temperatures degradation products form an explosive mixture with air.

### 10.2. Chemical stability

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Store separately from oxidising agents and strongly alkaline and strongly acidic materials.

**10.4. Conditions to avoid**

High temperature.

**10.5. Incompatible materials**

No additional information available

**10.6. Hazardous decomposition products**

In case of fire hazardous gases / vapors may form: flue gas.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

Acute toxicity : Not classified

Additional information	Acute toxicity (inhalation). Irritation of respiratory tract.
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<b>Lauric acid (143-07-7)</b>	
LD50 oral rat	> 5000 mg/kg
Additional information	Acute toxicity (inhalation). Irritation of respiratory tract.

Skin corrosion/irritation : Not classified

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Rabbit result: Eye irritation. (OECD 405 method)

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not mutagenic (AMES Test)  
Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-single exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-repeated exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

<b>Lauric acid (143-07-7)</b>	
Viscosity, kinematic	7.928 mm <sup>2</sup> /s

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Other information : Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practise.

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>Lauric acid (143-07-7)</b>	
LC50 fish 1	16 - 64 mg/l 96 h Danio rerio (zebra fish)
EC50 Daphnia 2	16.9 mg/l 48h (ECOTOX Database)

### 12.2. Persistence and degradability

<b>Lauric acid (143-07-7)</b>	
Persistence and degradability	Readily biodegradable. 85%. (OECD 301D method).

### 12.3. Bioaccumulative potential

<b>Lauric acid (143-07-7)</b>	
Log Pow	4.6
Bioaccumulative potential	Based on the coefficient n-octanol / water (log Pow) a concentration in organisms is possible.

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Additional information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal : Dispose in a safe manner in accordance with local/national regulations.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IATA
<b>14.1. UN number</b>	
Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>	
Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>	
Not applicable	Not applicable
Not applicable	Not applicable
<b>14.4. Packing group</b>	
Not applicable	Not applicable
<b>14.5. Environmental hazards</b>	
Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available	

### 14.6. Special precautions for user

#### . Overland transport

No data available

#### - Air transport

No data available

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Lauric acid is not on the REACH Candidate List

Lauric acid is not on the REACH Annex XIV List

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes:

5.1	Suitable extinguishing media	Modified	
8.2	Hand protection	Modified	Specified material, thickness, et cetera of gloves
8.2	Appropriate engineering controls	Added	
8.2	Personal protective equipment	Added	
9.1	Viscosity, dynamic	Added	
11.1	LD50 oral rat	Modified	

Abbreviations and acronyms:

SDS	Safety Data Sheet
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

Data sources : Handbook Of Pharmaceutical Excipients. Supplier.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H319	Causes serious eye irritation.

SDS EU (REACH Annex II) duchefa nieuwe logo

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*