



# LAURIC ACID (D23, 98%)

## Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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**DLM-563**

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

#### 1.1. Product identifier

Product form : Substance  
Substance name : LAURIC ACID (D23, 98%)  
EC no : 205-582-1 (Unlabeled)  
CAS No : 59154-43-7  
Product code : DLM-563  
Formula :  $\text{CD}_3(\text{CD}_2)_{10}\text{COOH}$   
Synonyms : Lauric acid. Dodecanoic acid

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

##### 1.2.1. Relevant identified uses

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

##### 1.2.2. Uses advised against

No additional information available

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

Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810  
USA

USA: 1-800-322-1174 Int: 1-978-749-8000  
[cilsales@isotope.com](mailto:cilsales@isotope.com) [www.isotope.com](http://www.isotope.com)

#### Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours)  
International: 1-703-741-5970 (24 hours)

### SECTION 2: Hazards identification

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

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

Eye Dam. 1 H318

Full text of H-phrases: see section 16

##### Classification according to Directive 67/548/EEC or 1999/45/EC

Xi; R36/37/38

Full text of R-phrases: see section 16

##### GHS-US classification

Eye Dam. 1 H318  
Aquatic Acute 2 H401

##### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

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Signal word (CLP)	: Danger
Hazard statements (CLP)	: H318 - Causes serious eye damage
Precautionary statements (CLP)	: P280 - Wear protective clothing, protective gloves P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a POISON CENTER/doctor/...

### GHS-US labelling

Hazard pictograms (GHS-US)



GHS05

Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: H318 - Causes serious eye damage H401 - Toxic to aquatic life
Precautionary statements (GHS-US)	: P273 - Avoid release to the environment P280 - Wear protective clothing, protective gloves P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a POISON CENTER or doctor/physician P501 - Dispose of contents/container to Comply with applicable regulations.

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
LAURIC ACID (D23, 98%) (Main constituent)	(CAS No) 59154-43-7 (EC no) 205-582-1 (Unlabeled)	100	Xi; R36/37/38

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
LAURIC ACID (D23, 98%) (Main constituent)	(CAS No) 59154-43-7 (EC no) 205-582-1 (Unlabeled)	100	Eye Dam. 1, H318

Full text of R-, H- and EUH-phrases: see section 16

Name	Product identifier	%	GHS-US classification
LAURIC ACID (D23, 98%) (Main constituent)	(CAS No) 59154-43-7	100	Eye Dam. 1, H318 Aquatic Acute 2, H401

Full text of H-phrases: see section 16

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Move out of dangerous area. Consult a physician and show this safety data sheet.
First-aid measures after inhalation	: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
First-aid measures after skin contact	: Wash off with soap and plenty of water. Consult a physician.
First-aid measures after eye contact	: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Harmful if swallowed.

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### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Hazardous decomposition products formed under fire conditions: Carbon oxides.

### 5.3. Advice for firefighters

Firefighting instructions : Wear self contained breathing apparatus for fire fighting if necessary.

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 : Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Do not flush with water. Keep in suitable, closed containers for disposal.

Methods for cleaning up : Sweep up and shovel. Keep in suitable, closed containers for disposal.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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

Storage conditions : Store at room temperature away from light and moisture.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Personal protective equipment : Gloves. Safety glasses. Protective clothing. Respiratory protection of the dependent type.



Hand protection : protective gloves.

Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear protective gloves/protective clothing/eye protection/face protection.

Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.

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### SECTION 9: Physical and chemical properties

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

Physical state	: Solid
Appearance	: Crystalline.
Molecular mass	: 223.46 g/mol (Labeled)
Colour	: White.
Odour	: No data available.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 44 - 46 °C (111 - 115 °F) - lit.
Freezing point	: No data available
Boiling point	: 225 °C (437 °F) at 133 hpa (100 mmHg) - lit.
Flash point	: 160 - 165 °C (320 - 329 °F) - Cleveland open cup
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: The product is not flammable. - Flammability (solids)
Vapour pressure	: No data available
Critical pressure	: 67 hPa (50 mmHg) at 210 °C (410 °F) 1 hPa (1 mmHg) at 121 °C (250 °F)
Relative vapour density at 20 °C	: No data available
Relative density	: 0.883 at 25°C (77°F)
Solubility	: Water: 0.00481 g/l at 25°C (77°F)
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Stable if stored under recommended conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

No data available.

#### 10.5. Incompatible materials

Bases, Oxidizing agents, Reducing agents.

#### 10.6. Hazardous decomposition products

carbon oxides.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

#### LAURIC ACID (D23, 98%) (59154-43-7)

LD50 oral rat	> 5000 mg/kg Rat - male and female - (OECD Test Guideline 401)
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Skin corrosion/irritation : Not classified  
rabbit - No skin irritation -24 h

Serious eye damage/irritation : Causes serious eye damage.  
rabbit - Risk of serious damage to eyes

Respiratory or skin sensitisation : No data available

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Germ cell mutagenicity	: No data available
Carcinogenicity	: Not classified
Reproductive toxicity	: No data available
Specific target organ toxicity (single exposure)	: Not classified No data available
Specific target organ toxicity (repeated exposure)	: Not classified No data available
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Symptoms/injuries after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/injuries after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Harmful if swallowed.

## SECTION 12: Ecological information

### 12.1. Toxicity

LAURIC ACID (D23, 98%) (59154-43-7)	
LC50 fishes 1	5 mg/l semi-static test LC50 - <i>Oryzias latipes</i> (Orange-red killifish) - 96 h (OECD Test Guideline 203)
EC50 Daphnia 1	3.6 mg/l Immobilization EC50 - <i>Daphnia magna</i> (Water flea) - 48 h (OECD Test Guideline 202)
EC50 other aquatic organisms 1	> 7.6 mg/l Growth inhibition EC50 - <i>Selenastrum capricornutum</i> (green algae) 72 h (OECD Test Guideline 201)
EC50 other aquatic organisms 2	> 1000 mg/l Respiration inhibition EC10 - <i>Pseudomonas putida</i> - 30 min (OECD Test Guideline 209)

### 12.2. Persistence and degradability

LAURIC ACID (D23, 98%) (59154-43-7)	
Biodegradation	86 % Readily biodegradable (OECD Test Guideline 301D) aerobic - Exposure time 30 d

### 12.3. Bioaccumulative potential

LAURIC ACID (D23, 98%) (59154-43-7)	
Bioaccumulative potential	No data available.

### 12.4. Mobility in soil

LAURIC ACID (D23, 98%) (59154-43-7)	
Ecology - soil	No data available.

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Other adverse effects : An environmental hazard cannot be excluded in the event of an unprofessional handling or disposal. Toxic to aquatic life.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Offer surplus and non-recyclable solutions to a licensed disposal company.  
Waste disposal recommendations : Dispose of as unused product.

## SECTION 14: Transport information

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

### 14.1. UN number

Not applicable

### 14.2. UN proper shipping name

Not applicable

### 14.3. Additional information

Other information : No supplementary information available.

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Special transport precautions : DOT/IMDG/IATA: Not dangerous goods.

### Overland transport

No additional information available

### Transport by sea

No additional information available

### Air transport

No additional information available

## 14.4. Environmental hazards

Other information : No supplementary information available.

## 14.5. Special precautions for user

Special transport precautions : DOT/IMDG/IATA: Not dangerous goods.

## 14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

LAURIC ACID (D23, 98%) (59154-43-7)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

### 15.2. International regulations

#### CANADA

No additional information available

#### 15.2.1. National regulations

No additional information available

### 15.3. US State regulations

LAURIC ACID (D23, 98%)(59154-43-7)	
State or local regulations	U.S. - Pennsylvania - RTK (Right to Know) List U.S. - New Jersey - Right to Know Hazardous Substance List This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

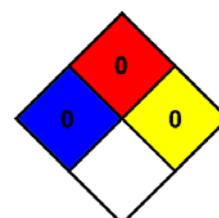
Full text of R-, H- and EUH-phrases::

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H318	Causes serious eye damage
R36/37/38	Irritating to eyes, respiratory system and skin
Xi	Irritant

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



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### HMIS III Rating

Health	: 0 Minimal Hazard - No significant risk to health
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard

CIL Multi-Solvent Mixture SDS

*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*