

# SAFETY DATA SHEET

Creation Date 24-Nov-2010

Revision Date 19-Dec-2025

Revision Number 5

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

## 1. Identification

<b>Product Name</b>	Dilauroyl peroxide
<b>Cat No. :</b>	<b>AC349740000; AC349740050; AC349741000; AC349745000</b>
<b>CAS No</b>	105-74-8
<b>Synonyms</b>	Dodecanoyl peroxide; LPO; Laurox <sup>04</sup> S; Lauroyl peroxide
<b>Recommended Use</b>	Laboratory chemicals.
<b>Uses advised against</b>	Food, drug, pesticide or biocidal product use.

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

#### Company

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

#### Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **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

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

Organic peroxides	Type D
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### Label Elements

#### Signal Word

Danger

#### Hazard Statements

Heating may cause a fire

**Precautionary Statements****Prevention**

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

Keep only in original packaging

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

**Storage**

Store at temperatures not exceeding 30 °C/ 86 °F. Keep cool

Protect from sunlight

Store separately

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

**Hazards classified under paragraph (d)(1)(ii) of 1910.1200**

No information available

**3. Composition/information on Ingredients**

Component	CAS No	Weight %
Lauroyl peroxide	105-74-8	>95

**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**

Do NOT induce vomiting. Clean mouth with water. Get medical attention.

**Most important symptoms and effects**

No information available.

**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** No information available  
**Method -** No information available

**Autoignition Temperature** >380 °C / >716 °F

**Explosion Limits**

Upper	No data available
Lower	No data available

**Oxidizing Properties** Oxidizer

**Sensitivity to Mechanical Impact** No information available  
**Sensitivity to Static Discharge** No information available

**Specific Hazards Arising from the Chemical**

Oxidizer: Contact with combustible/organic material may cause fire. May ignite combustibles (wood paper, oil, clothing, etc.).

**Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**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
0	0	1	N/A

## 6. Accidental release measures

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment as required.

**Environmental Precautions** See Section 12 for additional Ecological Information.

**Methods for Containment and Clean Up** Remove all sources of ignition. Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

## 7. Handling and Storage

**Handling** Avoid contact with skin and eyes. Do not breathe dust. Do not subject to grinding/shock/friction. Keep away from clothing and other combustible materials.

**Storage.** Do not store near combustible materials. Keep refrigerated. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep at temperature not exceeding 30°C. Incompatible Materials. Acids. Bases. Metals. Reducing Agent. Finely powdered metals. Strong reducing agents. Combustible material.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

OSHA - Occupational Safety and Health Administration

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

**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** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Recommended Filter type:** Particulates filter conforming to EN 143.

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

## 9. Physical and chemical properties

### Appearance

**Physical State** Powder Solid

**Color** White

**Odor** Slight

**Odor Threshold** No information available

### Property

**Melting Point/Range** 53 - 57 °C / 127.4 - 134.6 °F

**Softening Point** No data available

**Boiling Point/Range** No information available

**Flash Point** No information available

**Flammability (liquid)** Not applicable

**Flammability (solid,gas)** No information available

**Explosion Limits** No data available

### Remarks

### • Method

**Autoignition Temperature** >380 °C / >716 °F

**Decomposition Temperature** No data available

**Self-Accelerating Decomposition**

**Temperature (SADT)** 50°C

### pH

No information available

### Viscosity

Not applicable

**Water Solubility** Insoluble

**Solubility in other solvents** No information available

**Partition Coefficient (n-octanol/water)**

### log Pow

Lauroyl peroxide >6.5

**Vapor Pressure** No data available

**Density / Specific Gravity** No data available

**Bulk Density** No data available

**Vapor Density** Not applicable

**Particle characteristics** No data available

Solid

### Other Information

**Molecular Formula** C24 H46 O4

**Molecular Weight** 398.63

**Oxidizing Properties** Oxidizer

**Evaporation Rate** Not applicable - Solid

## 10. Stability and reactivity

**Reactive Hazard** Yes

**Stability** Oxidizer: Contact with combustible/organic material may cause fire.

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

**Incompatible Materials** Acids, Bases, Metals, Reducing Agent, Finely powdered metals, Strong reducing agents, Combustible material

**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

**Hazardous Polymerization** Hazardous polymerization does not occur.

**Hazardous Reactions** None under normal processing.

## 11. Toxicological information

### Information on expected route of exposure

**Inhalation** Avoid breathing dust or spray mist. May be harmful if inhaled.

**Ingestion** May be harmful if swallowed.

**Eyes** Avoid contact with eyes.

**Skin** Avoid contact with skin.

### Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lauroyl peroxide	>2000 mg/kg (Rat)	>2000 mg/kg (Rat)	-

**Toxicologically Synergistic Products** No information available

**(b) skin corrosion/irritation;** Based on available data, the classification criteria are not met

**(c) serious eye damage/irritation;** Based on available data, the classification criteria are not met

**(d) respiratory or skin sensitization;**

Respiratory Based on available data, the classification criteria are not met  
Skin Based on available data, the classification criteria are not met

**(e) germ cell mutagenicity;** Based on available data, the classification criteria are not met

Not mutagenic in AMES Test

**(f) carcinogenicity;** Based on available data, the classification criteria are not met

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

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Lauroyl peroxide	105-74-8	Not listed				

**(g) reproductive toxicity;** Based on available data, the classification criteria are not met

**(h) STOT-single exposure;** Based on available data, the classification criteria are not met

**(i) STOT-repeated exposure;** Based on available data, the classification criteria are not met

**Target Organs** None known.

**(j) aspiration hazard;** Not applicable  
Solid

**Symptoms / effects, both acute and delayed** No information available.

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

**Endocrine Disrupting Properties** This product does not contain any known or suspected endocrine disruptors.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains. .

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Lauroyl peroxide	Not listed	LC50: > 0.3 mg/L, 96h semi-static (Poecilia reticulata)	Not listed	Not listed

**Persistence and Degradability** Persistence is unlikely

**Bioaccumulation/ Accumulation** No information available.

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

Component	log Pow
Lauroyl peroxide	>6.5

## 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** UN3106  
**Proper Shipping Name** ORGANIC PEROXIDE TYPE D, SOLID  
**Technical Shipping Name** Lauroyl peroxide  
**Hazard Class** 5.2

### TDG

**UN-No** UN3106  
**Proper Shipping Name** ORGANIC PEROXIDE TYPE D, SOLID  
**Technical Shipping Name** Lauroyl peroxide  
**Hazard Class** 5.2  
**Packing Group** II

### IATA

**UN-No** UN3106  
**Proper Shipping Name** ORGANIC PEROXIDE TYPE D, SOLID  
**Technical Shipping Name** Lauroyl peroxide  
**Hazard Class** 5.2

### IMDG/IMO

**UN-No** UN3106  
**Proper Shipping Name** ORGANIC PEROXIDE TYPE D, SOLID  
**Technical Shipping Name** Lauroyl peroxide  
**Hazard Class** 5.2

## 15. Regulatory Information

### United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification -	TSCA - EPA Regulatory
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			Active-Inactive	Flags
Lauroyl peroxide	105-74-8	X	ACTIVE	-

**Legend:**

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

X - Listed

'-' - Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)** Not applicable

**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
Lauroyl peroxide	105-74-8	X	-	203-326-3	X	X	X	X	X	KE-03388

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

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA - Occupational Safety and Health Administration** OSHA - United States Occupational Safety and Health Administration

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Lauroyl peroxide	-	TQ: 7500 lb

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

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

**U.S. State Right-to-Know Regulations**

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Lauroyl peroxide	X	-	X	-	X

**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** Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Lauroyl peroxide	105-74-8	-	-	-

#### **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)
Lauroyl peroxide	105-74-8	Not applicable	Not applicable	Not applicable	Not applicable

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**

Not applicable

#### Other International Regulations

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)
Lauroyl peroxide	105-74-8	Not applicable	Not applicable	Not applicable	Not applicable

### 16. Other Information

**Prepared By** Product stewardship (Regulatory Affairs)  
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**Print Date** 19-Dec-2025  
**Revision Summary** Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024.

#### 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**