

# **SAFETY DATA SHEET**

Creation Date 08-March-2012 Revision Date 02-April-2024 Revision Number 3

## 1. Identification

Product Name Palmitoyl chloride

Cat No. : C30429

CAS-No 112-67-4

Synonyms No information available

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

Fisher Scientific 112 Colonnade Road, Ottawa, ON K2E 7L6,

Canada

Tel: 1-800-234-7437

#### **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

WHMIS 2015 Classification Classified as hazardous under the Hazardous Products Regulations (SOR/2015-17)

Skin Corrosion/IrritationCategory 1 BSerious Eye Damage/Eye IrritationCategory 1 Category 1 Category 1

**Label Elements** 

## **Signal Word**

Danger

#### **Hazard Statements**

Causes severe skin burns and eye damage May cause an allergic skin reaction

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## **Precautionary Statements**

#### Prevention

Do not breathe dust/fumes/gas/mist/vapours/spray

Wash face, hands and any exposed skin thoroughly after handling

Contaminated work clothing should not be allowed out of the workplace

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

#### Response

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

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

Immediately call a POISON CENTER/doctor Wash contaminated clothing before reuse

#### Storage

Store locked up

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %		
Hexadecanoyl chloride	112-67-4	>95		

## 4. First-aid measures

Eye Contact Immediate medical attention is required. Rinse immediately with plenty of water, also under

the eyelids, for at least 15 minutes.

**Skin Contact**Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Immediate medical attention is required.

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

respiration. Immediate medical attention is required.

**Ingestion** Do NOT induce vomiting. Call a physician immediately.

severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the

hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Notes to Physician Treat symptomatically

## 5. Fire-fighting measures

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

Unsuitable Extinguishing Media No information available

## Palmitoyl chloride

**Flash Point** 160 °C / 320 °F

Method -No information available

**Autoignition Temperature** 

**Explosion Limits** 

No information available

No data available Upper Lower No data available Sensitivity to Mechanical Impact No information available Sensitivity to Static Discharge No information available

#### **Specific Hazards Arising from the Chemical**

Contact with water liberates toxic gas. Water reactive. Produce flammable gases on contact with water.

#### **Hazardous Combustion Products**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Phosgene. Hydrogen chloride gas.

#### **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

**Flammability** Physical hazards Health Instability 3 0 0 N/A

#### 6. Accidental release measures

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

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. Wear self-contained breathing apparatus and protective suit. Do not expose spill to water. Do not let this chemical enter the environment.

## Handling and storage

Handling

Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Handle product only in closed system or provide appropriate exhaust ventilation. Do not allow contact with water because of violent reaction. Keep under nitrogen.

Storage.

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Protect from moisture. Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Bases. Water. Strong bases. Alcohols. Amines. Metals.

### 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

### Palmitoyl chloride

**Eve 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			
DVO			

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**

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly Recommended Filter type: Organic gases and vapours filter Type A Brown conforming to EN14387

When RPE is used a face piece Fit Test should be conducted

#### **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

Liquid **Physical State Appearance** Yellow

Odor No information available **Odor Threshold** No information available No information available рH

Melting Point/Range 9 - 14 °C / 48.2 - 57.2 °F **Boiling Point/Range** 199 °C / 390.2 °F @ 2 mmHq

160 °C / 320 °F Flash Point **Evaporation Rate** No information available Not applicable Flammability (solid, gas)

Flammability or explosive limits

Upper No data available Lower No data available **Vapor Pressure** No information available **Vapor Density** No information available

**Specific Gravity** 0.900

Solubility Decomposes in contact with water

Partition coefficient; n-octanol/water No data available No information available **Autoignition Temperature Decomposition Temperature** No information available

Viscosity No information available C16 H31 CI O Molecular Formula

**Molecular Weight** 274.88

## 10. Stability and reactivity

**Reactive Hazard** None known, based on information available

#### Palmitoyl chloride

Stability Stable under normal conditions. Moisture sensitive.

**Conditions to Avoid** Incompatible products. Exposure to moist air or water.

**Incompatible Materials** Bases, Water, Strong bases, Alcohols, Amines, Metals

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2), Phosgene, Hydrogen chloride gas

**Hazardous Polymerization** No information available.

**Hazardous Reactions** May react with metals and lead to the formation of flammable hydrogen gas.

## 11. Toxicological information

**Acute Toxicity** 

**Product Information** 

No acute toxicity information is available for this product

**Component Information** 

**Toxicologically Synergistic** 

No information available

**Products** 

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

No information available Irritation

Sensitization May cause sensitization by skin contact

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

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico	
Hexadecanoyl chloride	112-67-4	Not listed					

**Mutagenic Effects** Did not show mutagenic effects in animal experiments

**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

delayed

Symptoms / effects,both acute and Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble

breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle

pain or flushing

**Endocrine Disruptor Information** No information available

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

## 12. Ecological information

**Ecotoxicity** 

Do not empty into drains. .

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

Palmitoyl chloride

## 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 UN3265

Proper Shipping Name Corrosive liquid, acidic, organic, n.o.s.

Technical Name Hexadecanoyl chloride

Hazard Class 8
Packing Group ||

TDG

UN-No UN3265

Proper Shipping Name Corrosive liquid, acidic, organic, n.o.s.

Hazard Class 8
Packing Group

IATA

UN-No UN3265

Proper Shipping Name Corrosive liquid, acidic, organic, n.o.s.

Hazard Class 8
Packing Group ||

IMDG/IMO

UN-No UN3265

Proper Shipping Name Corrosive liquid, acidic, organic, n.o.s.

Hazard Class 8
Packing Group ||

## 15. Regulatory information

#### **International Inventories**

Component	CAS-No	DSL	NDSL	TSCA	TSCA Inventory notification - Active-Inactive		ELINCS	NLP
Hexadecanoyl chloride	112-67-4	-	Χ	X	ACTIVE	203-996-7	-	-

Component	CAS-No	IECSC	KECL	ENCS	ISHL	TCSI	AICS	NZIoC	PICCS
Hexadecanovl chloride	112-67-4	X	_	X	X	X	X	X	X

#### 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

Not applicable

## 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)
Hexadecanoyl chloride	112-67-4	Listed	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)
Hexadecanoyl chloride	112-67-4	Not applicable	Not applicable	Not applicable	Not applicable

16. Other information

Prepared By Product Safety Department

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**Revision Summary** New emergency telephone response service provider.

## **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**