

## PALMITOYL CHLORIDE

GHS Safety Data Sheet

Version No:5.1.1.1  
Page 1 of 10

### Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### PRODUCT NAME

PALMITOYL CHLORIDE

#### OTHER NAMES

C16-H31-Cl-O, CH<sub>3</sub>(CH<sub>2</sub>)<sub>14</sub>COCl, "hexadecanoyl chloride"

#### PROPER SHIPPING NAME

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.(contains palmitoyl chloride)

#### PRODUCT USE

■ The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.  
Intermediate.

#### SUPPLIER

Company: S D FINE- CHEM LIMITED

Address:

315- 317, T.V.Ind.Estate,

248, Worli Road,

Mumbai- 400030, India

www.sdfine.com

Telephone: 91- 22 24959898/99

Fax: 91- 22 2493 7232

Email: technical@sdfine.com

### Section 2 - HAZARDS IDENTIFICATION

#### GHS Classification

Chronic Aquatic Hazard Category 1

Metal Corrosion Category 1

Serious Eye Damage Category 1

Skin Corrosion/Irritation Category 1B



#### EMERGENCY OVERVIEW

##### HAZARD

DANGER

Determined by using GHS criteria

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

H318

Causes serious eye damage.

H410

Very toxic to aquatic life with long lasting effects.

continued...

# PALMITOYL CHLORIDE

GHS Safety Data Sheet

Version No:5.1.1.1

Page 2 of 10

## Section 2 - HAZARDS IDENTIFICATION

### PRECAUTIONARY STATEMENTS

#### Prevention

| Code | Phrase                                                                     |
|------|----------------------------------------------------------------------------|
| P234 | Keep only in original container.                                           |
| P260 | Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.                      |
| P264 | Wash ... thoroughly after handling.                                        |
| P273 | Avoid release to the environment.                                          |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |

#### Response

| Code           | Phrase                                                                                                                           |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.                                                                               |
| P303+P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.                       |
| P304+P340      | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.                                 |
| 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.                                                                            |
| P363           | Wash contaminated clothing before reuse.                                                                                         |
| P390           | Absorb spillage to prevent material damage.                                                                                      |
| P391           | Collect spillage.                                                                                                                |

#### Storage

| Code | Phrase                                                                  |
|------|-------------------------------------------------------------------------|
| P405 | Store locked up.                                                        |
| P406 | Store in corrosive resistant container or with a resistant inner liner. |

#### Disposal

| Code | Phrase                               |
|------|--------------------------------------|
| P501 | Dispose of contents/container to ... |

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| NAME                                             | CAS RN     | %   |
|--------------------------------------------------|------------|-----|
| palmitoyl chloride                               | 112-67-4   | >98 |
| hydrolyses in water to produce hydrogen chloride | 7647-01-0. |     |

## Section 4 - FIRST AID MEASURES

### SWALLOWED

- For advice, contact a Poisons Information Centre or a doctor at once.
- Urgent hospital treatment is likely to be needed.
- If swallowed do NOT induce vomiting.
- If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

### EYE

- If this product comes in contact with the eyes:
- Immediately hold eyelids apart and flush the eye continuously with running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
- Transport to hospital or doctor without delay.

### SKIN

- If skin or hair contact occurs:
- Immediately flush body and clothes with large amounts of water, using safety shower if available.
- Quickly remove all contaminated clothing, including footwear.
- Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.
- Transport to hospital, or doctor.

continued...

# PALMITOYL CHLORIDE

## GHS Safety Data Sheet

Version No:5.1.1.1

Page 3 of 10

## Section 4 - FIRST AID MEASURES

### INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema.
- Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs).
- As this reaction may be delayed up to 24 hours after exposure, affected individuals need complete rest (preferably in semi-recumbent posture) and must be kept under medical observation even if no symptoms are (yet) manifested.
- Before any such manifestation, the administration of a spray containing a dexamethasone derivative or beclomethasone derivative may be considered.

### NOTES TO PHYSICIAN

- Treat symptomatically.

For acute or short term repeated exposures to strong acids:

- Airway problems may arise from laryngeal edema and inhalation exposure. Treat with 100% oxygen initially.
- Respiratory distress may require cricothyroidotomy if endotracheal intubation is contraindicated by excessive swelling
- Intravenous lines should be established immediately in all cases where there is evidence of circulatory compromise.
- Strong acids produce a coagulation necrosis characterised by formation of a coagulum (eschar) as a result of the dessicating action of the acid on proteins in specific tissues.

## Section 5 - FIRE FIGHTING MEASURES

### EXTINGUISHING MEDIA

- DO NOT use water.

### FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Use fire fighting procedures suitable for surrounding area.

### FIRE/EXPLOSION HAZARD

- Combustible.
- Slight fire hazard when exposed to heat or flame.
- Acids may react with metals to produce hydrogen, a highly flammable and explosive gas.
- Heating may cause expansion or decomposition leading to violent rupture of containers.

Combustion products include: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), hydrogen chloride, phosgene, other pyrolysis products typical of burning organic material.

Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

### FIRE INCOMPATIBILITY

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

## Section 6 - ACCIDENTAL RELEASE MEASURES

### MINOR SPILLS

- Drains for storage or use areas should have retention basins for pH adjustments and dilution of spills before discharge or disposal of material.
- Check regularly for spills and leaks.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.

### MAJOR SPILLS

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.

continued...

# PALMITOYL CHLORIDE

## GHS Safety Data Sheet

Version No:5.1.1.1

Page 4 of 10

## Section 6 - ACCIDENTAL RELEASE MEASURES

- Prevent, by any means available, spillage from entering drains or water course.  
**Personal Protective Equipment advice is contained in Section 8 of the MSDS.**

## Section 7 - HANDLING AND STORAGE

### PROCEDURE FOR HANDLING

- Contains low boiling substance:  
Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.
- Check for bulging containers.
- Vent periodically
- Always release caps or seals slowly to ensure slow dissipation of vapours.
- DO NOT allow clothing wet with material to stay in contact with skin.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- WARNING: To avoid violent reaction, ALWAYS add material to water and NEVER water to material.

### PACKAGING MATERIAL INCOMPATIBILITIES

|               |                                              |
|---------------|----------------------------------------------|
| Chemical Name | Container Type                               |
|               | " Acetal (Delrin)" , " Cast iron" , Neoprene |

### SUITABLE CONTAINER

- DO NOT use aluminium or galvanised containers.
  - Check regularly for spills and leaks.
  - Glass container is suitable for laboratory quantities.
  - Lined metal can, lined metal pail/ can.
  - Plastic pail.
  - Polyliner drum.
  - Packing as recommended by manufacturer.
- For low viscosity materials
- Drums and jerricans must be of the non-removable head type.
  - Where a can is to be used as an inner package, the can must have a screwed enclosure. <</>.

### STORAGE INCOMPATIBILITY

- Hydrogen chloride:
  - reacts strongly with strong oxidisers (releasing chlorine gas), acetic anhydride, caesium cyanotridecahydrodecaborate(2-), ethylidene difluoride, hexalithium disilicide, metal acetylide, sodium, silicon dioxide, tetraselenium tetranitride, and many organic materials
  - is incompatible with alkaline materials, acetic anhydride, acetylides, aliphatic amines, alkanolamines, alkylene oxides, aluminium, aluminium-titanium alloys, aromatic amines, amines, amides, 2-aminoethanol, ammonia, ammonium hydroxide, borides, calcium phosphide, carbides, carbonates, cyanides, chlorosulfonic acid, ethylenediamine, ethyleneimine, epichlorohydrin, formaldehyde, isocyanates, metals, metal oxides, metal hydroxides, metal acetylides, metal carbides, oleum, organic anhydrides, potassium permanganate, perchloric acid, phosphides, 3-propiolactone, silicides, sulfides, sulfites, sulfuric acid, uranium phosphide, vinyl acetate, vinylidene fluoride
  - attacks most metals forming flammable hydrogen gas, and some plastics, rubbers and coatings
  - reacts with zinc, brass, galvanised iron, aluminium, copper and copper alloys.
  - Reacts with mild steel, galvanised steel / zinc producing hydrogen gas which may form an explosive mixture with air.
  - Segregate from alcohol, water.
  - Segregate from alkalies, oxidising agents and chemicals readily decomposed by acids, i.e. cyanides, sulfides, carbonates.
  - Avoid strong bases.
  - NOTE: May develop pressure in containers; open carefully. Vent periodically.

### STORAGE REQUIREMENTS

- Store in original containers.
  - Keep containers securely sealed.
  - Store in a cool, dry, well-ventilated area.
  - Store away from incompatible materials and foodstuff containers.
- Moisture sensitive.

continued...

# PALMITOYL CHLORIDE

GHS Safety Data Sheet

Version No:5.1.1.1  
Page 5 of 10

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE CONTROLS

| Source                                                                      | Material                              | Peak ppm | Peak mg/m³ |
|-----------------------------------------------------------------------------|---------------------------------------|----------|------------|
| India Permissible Levels of Certain Chemical Substances in Work Environment | hydrogen chloride (Hydrogen chloride) | 5        | 7          |

The following materials had no OELs on our records

- palmitoyl chloride:

CAS:112- 67- 4

### MATERIAL DATA

HYDROGEN CHLORIDE:

PALMITOYL CHLORIDE:

- for hydrogen chloride:

Odour Threshold Value: 0.262 ppm (detection), 10.06 ppm (recognition)

NOTE: Detector tubes for hydrochloric acid, measuring in excess of 1 ppm, are available commercially.

Hydrogen chloride is a strong irritant to the eyes, mucous membranes and skin.

### PERSONAL PROTECTION



### RESPIRATOR

- Type B-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

### EYE

- Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure
- Chemical goggles whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted
- Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afford face protection.
- Alternatively a gas mask may replace splash goggles and face shields.

### HANDS/FEET

- Elbow length PVC gloves.

- When handling corrosive liquids, wear trousers or overalls outside of boots, to avoid spills entering boots.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:.

- Neoprene gloves.

### OTHER

- Overalls.
- PVC Apron.
- PVC protective suit may be required if exposure severe.
- Eyewash unit.

### ENGINEERING CONTROLS

■ Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation

continued...

# PALMITOYL CHLORIDE

## GHS Safety Data Sheet

Version No:5.1.1.1

Page 6 of 10

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

that strategically "adds" and "removes" air in the work environment.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Colourless to yellow liquid.

### PHYSICAL PROPERTIES

Corrosive.

Acid.

Reacts violently with water.

|                           |                   |                                 |                  |
|---------------------------|-------------------|---------------------------------|------------------|
| State                     | LIQUID            | Molecular Weight                | 274.88           |
| Melting Range (°C)        | 11- 13            | Viscosity                       | Not Available    |
| Boiling Range (°C)        | 158- 160 (0.2 mm) | Solubility in water (g/L)       | Reacts violently |
| Flash Point (°C)          | 160               | pH (1% solution)                | Not available    |
| Decomposition Temp (°C)   | Not Available     | pH (as supplied)                | Not applicable   |
| Autoignition Temp (°C)    | Not available     | Vapour Pressure (kPa)           | Not available    |
| Upper Explosive Limit (%) | Not available     | Specific Gravity (water=1)      | 0.91             |
| Lower Explosive Limit (%) | Not available     | Relative Vapour Density (air=1) | >1               |
| Volatile Component (%vol) | Not available     | Evaporation Rate                | Not available    |

## Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

### CONDITIONS CONTRIBUTING TO INSTABILITY

- Contact with alkaline material liberates heat.
- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

*For incompatible materials - refer to Section 7 - Handling and Storage.*

## Section 11 - TOXICOLOGICAL INFORMATION

### Health hazard summary table:

|                                   |                |
|-----------------------------------|----------------|
| Acute toxicity                    | Not applicable |
| Skin corrosion/irritation         | Skin Corr. 1 B |
| Serious eye damage/irritation     | Eye Dam. 1     |
| Respiratory or skin sensitization | Not applicable |
| Germ cell mutagenicity            | Not applicable |
| Carcinogenicity                   | Not applicable |
| Reproductive toxicity             | Not applicable |
| STOT- single exposure             | Not applicable |
| STOT- repeated exposure           | Not applicable |
| Aspiration hazard                 | Not applicable |

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

##### SWALLOWED

- The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.
- Ingestion of acidic corrosives may produce burns around and in the mouth, the throat and oesophagus. Immediate pain and difficulties in swallowing and speaking may also be evident.
- The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.

continued...

# PALMITOYL CHLORIDE

## GHS Safety Data Sheet

Version No:5.1.1.1

Page 7 of 10

## Section 11 - TOXICOLOGICAL INFORMATION

### EYE

- The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.
- If applied to the eyes, this material causes severe eye damage.
- Direct eye contact with acid corrosives may produce pain, tears, sensitivity to light and burns. Mild burns of the epithelia generally recover rapidly and completely.
- Irritation of the eyes may produce a heavy secretion of tears (lachrymation).

### SKIN

- The material can produce chemical burns following direct contact with the skin.
- Skin contact with acidic corrosives may result in pain and burns; these may be deep with distinct edges and may heal slowly with the formation of scar tissue.
- Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.
- Open cuts, abraded or irritated skin should not be exposed to this material.
- Solution of material in moisture on the skin, or perspiration, may markedly increase skin corrosion and accelerate tissue destruction.
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

### INHALED

- The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.
- Corrosive acids can cause irritation of the respiratory tract, with coughing, choking and mucous membrane damage. There may be dizziness, headache, nausea and weakness.
- Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.
- Inhalation hazard is increased at higher temperatures.
- Inhalation of quantities of liquid mist may be extremely hazardous, even lethal due to spasm, extreme irritation of larynx and bronchi, chemical pneumonitis and pulmonary oedema.
- Hydrogen chloride (HCl) vapour or fumes present a hazard from a single acute exposure. Exposures of 1300 to 2000 ppm have been lethal to humans in a few minutes.
- Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant.

### CHRONIC HEALTH EFFECTS

- Repeated or prolonged exposure to acids may result in the erosion of teeth, swelling and/or ulceration of mouth lining. Irritation of airways to lung, with cough, and inflammation of lung tissue often occurs. Chronic exposure may inflame the skin or conjunctiva. Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Chronic minor exposure to hydrogen chloride (HCl) vapour or fume may cause discolouration or erosion of the teeth, bleeding of the nose and gums; and ulceration of the nasal mucous membranes. Repeated exposures of animals to concentrations of about 34 ppm HCl produced no immediate toxic effects. Workers exposed to hydrochloric acid suffered from gastritis and a number of cases of chronic bronchitis have also been reported. Repeated or prolonged exposure to dilute solutions of HCl may cause dermatitis.

### TOXICITY AND IRRITATION

- Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. No significant acute toxicological data identified in literature search. for acid mists, aerosols, vapours Data from assays for genotoxic activity in vitro suggest that eukaryotic cells are susceptible to genetic damage when the pH falls to about 6.5. Cells from the respiratory tract have not been examined in this respect. The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The material may produce respiratory tract irritation, and result in damage to the lung including reduced lung function. The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.

### CARCINOGEN

continued...

# PALMITOYL CHLORIDE

## GHS Safety Data Sheet

Version No:5.1.1.1

Page 8 of 10

### Section 11 - TOXICOLOGICAL INFORMATION

|                   |                                                                                             |       |   |                                                      |
|-------------------|---------------------------------------------------------------------------------------------|-------|---|------------------------------------------------------|
| hydrogen chloride | International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs | Group | 3 | Not classifiable as to its carcinogenicity to humans |
|-------------------|---------------------------------------------------------------------------------------------|-------|---|------------------------------------------------------|

#### SKIN

|                    |                                                    |                               |      |
|--------------------|----------------------------------------------------|-------------------------------|------|
| palmitoyl chloride | GESAMP/EHS Composite List - GESAMP Hazard Profiles | D1: skin irritation/corrosion | (1)  |
| hydrogen chloride  | GESAMP/EHS Composite List - GESAMP Hazard Profiles | D1: skin irritation/corrosion | (3C) |
| hydrogen chloride  | GESAMP/EHS Composite List - GESAMP Hazard Profiles | D1: skin irritation/corrosion | 3C   |

### Section 12 - ECOLOGICAL INFORMATION

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
This material and its container must be disposed of as hazardous waste.  
Avoid release to the environment.  
Refer to special instructions/ safety data sheets.

#### Ecotoxicity

| Ingredient        | Persistence: Water/Soil | Persistence: Air  | Bioaccumulation | Mobility |
|-------------------|-------------------------|-------------------|-----------------|----------|
| hydrogen chloride | LOW                     | No Data Available | LOW             | HIGH     |

#### GESAMP/EHS COMPOSITE LIST - GESAMP Hazard Profiles

| Name /<br>Cas No /<br>RTECS No | EHS | TRN | A1a | A1b | A1 | A2  | B1 | B2 | C1  | C2  | C3  | D1 | D2  | D3 | E1 | E2 | E3 |
|--------------------------------|-----|-----|-----|-----|----|-----|----|----|-----|-----|-----|----|-----|----|----|----|----|
| /                              | 226 | 278 | 5   | —   | 0  | (R) | 0  | NI | (0) | (0) | (1) | —  | (1) | —  | —  | NI | 2  |
| CAS:112-67-4 /                 | 1   | 0   |     |     |    |     |    |    |     |     |     |    |     |    |    |    |    |

#### Legend:

EHS=EHS Number (EHS=GESAMP Working Group on the Evaluation of the Hazards of Harmful Substances Carried by Ships) NRT=Net Register Tonnage, A1a=Bioaccumulation log Pow, A1b=Bioaccumulation BCF, A1=Bioaccumulation, A2=Biodegradation, B1=Acuteaquatic toxicity LC/EC50 (mg/l), B2=Chronic aquatic toxicity NOEC (mg/l), C1=Acute mammalian oral toxicity LD50 (mg/kg), C2=Acute mammalian dermal toxicity LD50 (mg/kg), C3=Acute mammalian inhalation toxicity LC50 (mg/kg), D1=Skin irritation & corrosion, D2=Eye irritation & corrosion, D3=Long-term health effects, E1=Tainting, E2=Physical effects on wildlife & benthic habitats, E3=Interference with coastal amenities,

For column A2: R=Readily biodegradable, NR=Not readily biodegradable.

For column D3: C=Carcinogen, M=Mutagenic, R=Reprotoxic, S=Sensitising, A=Aspiration hazard, T=Target organ systemic toxicity, L=Lung injury, N=Neurotoxic, I=Immunotoxic.

For column E1: NT=Not tainting (tested), T=Tainting test positive.

For column E2: Fp=Persistent floater, F=Floater, S=Sinking substances.

The numerical scales start from 0 (no hazard), while higher numbers reflect increasing hazard.

(GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships)

### Section 13 - DISPOSAL CONSIDERATIONS

■ Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction.
- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.

continued...

# PALMITOYL CHLORIDE

GHS Safety Data Sheet

Version No:5.1.1.1

Page 9 of 10

## Section 13 - DISPOSAL CONSIDERATIONS

- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Treat and neutralise at an approved treatment plant. Treatment should involve: Neutralisation with soda-ash or soda-lime followed by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus
- Decontaminate empty containers with 5% aqueous sodium hydroxide or soda ash, followed by water. Observe all label safeguards until containers are cleaned and destroyed.

## Section 14 - TRANSPORTATION INFORMATION



Labels Required: CORROSIVE

**HAZCHEM:**  
2X

Land Transport UNDG:

|                                                                                        |      |                   |      |
|----------------------------------------------------------------------------------------|------|-------------------|------|
| Class or division:                                                                     | 8    | Subsidiary risk:  | None |
| UN No.:                                                                                | 3265 | UN packing group: | II   |
| Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains palmitoyl chloride) |      |                   |      |

**Air Transport IATA:**

|                     |        |                    |      |
|---------------------|--------|--------------------|------|
| ICAO/IATA Class:    | 8      | ICAO/IATA Subrisk: | None |
| UN/ID Number:       | 3265   | Packing Group:     | II   |
| Special provisions: | A3A803 |                    |      |

Shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains palmitoyl chloride)

**Maritime Transport IMDG:**

|                                                                                        |            |                     |      |
|----------------------------------------------------------------------------------------|------------|---------------------|------|
| IMDG Class:                                                                            | 8          | IMDG Subrisk:       | None |
| UN Number:                                                                             | 3265       | Packing Group:      | II   |
| EMS Number:                                                                            | F- A, S- B | Special provisions: | 274  |
| Limited Quantities:                                                                    | 1 L        | Marine Pollutant:   | Yes  |
| Shipping name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (contains palmitoyl chloride) |            |                     |      |

GESAMP hazard profiles for this material can be found in section 12 of the MSDS.

## Section 15 - REGULATORY INFORMATION

### REGULATIONS

**palmitoyl chloride (CAS: 112-67-4) is found on the following regulatory lists;**

"FisherTransport Information", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO Provisional Categorization of Liquid Substances - List 1: Pure or technically pure products", "OECD List of High Production Volume (HPV) Chemicals", "Sigma-AldrichTransport Information", "WHO Guidelines for Drinking-water Quality - Chemicals for which guideline values have not been established"

### Regulations for ingredients

**hydrogen chloride (CAS: 7647-01-0) is found on the following regulatory lists;**

"Acros Transport Information", "CODEX General Standard for Food Additives (GSFA) - Additives Permitted for Use in Food in General, Unless Otherwise Specified, in Accordance with GMP", "FisherTransport Information", "GESAMP/EHS Composite List - GESAMP Hazard Profiles", "IMO IBC Code Chapter 17: Summary of minimum requirements", "IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid"

continued...

# PALMITOYL CHLORIDE

## GHS Safety Data Sheet

Version No:5.1.1.1

Page 10 of 10

### Section 15 - REGULATORY INFORMATION

Substances Carried in Bulk", "India Chemical Accidents Rules - Schedule 1: List of Hazardous Chemicals", "India Chemical Accidents Rules - Schedule 3: Named Chemicals", "India Hazardous Wastes (Management, Handling and Transboundary Movement) Rules - Schedule 2: List of Wastes Constituents with Concentration Limits", "India Manufacture, Storage and Import of Hazardous Chemical Rules - Schedule 1: List of Hazardous and Toxic Chemicals", "India Manufacture, Storage and Import of Hazardous Chemical Rules - Schedule 3: List of Hazardous Chemicals for Application of Rules 5 and 7 to 15", "India Permissible Levels of Certain Chemical Substances in Work Environment", "International Agency for Research on Cancer (IARC) - Agents Reviewed by the IARC Monographs", "International Council of Chemical Associations (ICCA) - High Production Volume List", "International Maritime Dangerous Goods Requirements (IMDG Code) - Goods Forbidden for Transport", "International Numbering System for Food Additives", "OECD List of High Production Volume (HPV) Chemicals", "Sigma-Aldrich Transport Information", "United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances - Table II", "United Nations List of Precursors and Chemicals Frequently used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control (Red List) - Table II", "WHO Guidelines for Drinking-water Quality - Chemicals for which guideline values have not been established"

### Section 16 - OTHER INFORMATION

#### Denmark Advisory list for selfclassification of dangerous substances

| Substance          | CAS         | Suggested codes      |
|--------------------|-------------|----------------------|
| palmitoyl chloride | 112- 67- 4  | Xi; R38 N;<br>R50/53 |
| hydrogen chloride  | 7647- 01- 0 | Xi; R38 N;<br>R50/53 |

- Classification of the preparation and its individual components has drawn on official and authoritative sources using available literature references.
- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

The above information is believed to be accurate and represent the best information currently available to us, but does not represent any warranty expressed or implied of the properties of the product. User should make their own investigation to determine the suitability of the information for their particular purpose.

Issue Date: 4-Jul-2018