#### SIGMA-ALDRICH

## Material Safety Data Sheet

Date Printed: 16/OCT/2005
Date Updated: 16/MAR/2004
Version 1.2
According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

# 1 - Product and Company Information

Product Name Product Number	HEXANOYL CHLORIDE, 99+% 294659
Company	Sigma-Aldrich Pty. Ltd. 12 Anella Avenue Castle Hill NSW 2154 Australia
Technical Phone # Fax	+61 2 9841 0555 (1800 800 097) +61 2 9841 0500 (1800 800 096)
Emergency Phone #	+44 8701906777 (1800 448 465)

### 2 - Composition/Information on Ingredients

Product Name		CAS #	EC no	Annex I Index Number
CAPROYL CHLORIDE		142-61-0	205-549-1	
	0.0111.010			

Formula C6H11Cl0 Molecular Weight 134.61 AMU

### 3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT Causes burns. Irritating to respiratory system.

## 4 - First Aid Measures

### AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

### AFTER EYE CONTACT

Assure adequate flushing of the eyes by separating the eyelids with fingers.

### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

# 5 - Fire Fighting Measures

# CONDITIONS OF FLAMMABILITY

Water hydrolyzes material liberating acidic gas which in contact with metal surfaces can generate flammable and/or explosive hydrogen gas.

# EXTINGUISHING MEDIA

Suitable: Carbon dioxide. Dry chemical powder.

Unsuitable: Do not use water.

### SPECIAL PROTECTIVE EOUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

# 6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL Evacuate area. Shut off all sources of ignition.

## PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

### METHODS FOR CLEANING UP

Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

# 7 - Handling and Storage

### HANDLING

Directions for Safe Handling: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

### **STORAGE**

Conditions of Storage: Keep tightly closed. Keep away from heat and open flame. Store in a cool dry place.

SPECIAL REQUIREMENTS: Moisture sensitive.

# 8 - Exposure Controls / Personal Protection

### ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

## GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Remove and wash contaminated clothing promptly.

# PERSONAL PROTECTIVE EQUIPMENT

Special Protective Measures: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Faceshield (8-inch minimum).

# 9 - Physical and Chemical Properties

Appearance	Color: Faintly yell Form: Clear liquid	OW
Property	Value	At Temperature or Pressure
pH BP/BP Range MP/MP Range Flash Point Flammability Autoignition Temp	N/A 150.0 - 153.0 °C N/A 82 °C N/A N/A	Method: closed cup

Oxidizing Properties N/AExplosive Properties N/A Explosion Limits N/A Vapor Pressure N/ASG/Density 0.978 g/cm3Partition Coefficient N/A Viscosity N/A Vapor Density N/ASaturated Vapor Conc. N/AEvaporation Rate N/A Bulk Density N/ADecomposition Temp. N/A Solvent Content N/AWater Content N/A Surface Tension N/AConductivity N/AMiscellaneous Data N/A Solubility N/A

## 10 - Stability and Reactivity

### STABILITY

Materials to Avoid: Strong bases, Oxidizing agents, Alcohols, Water.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Phosgene gas, Hydrogen chloride gas Carbon monoxide, Carbon dioxide.

## 11 - Toxicological Information

## SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Inhalation may result in spasm, inflammation and edema of the larynxand bronchi, chemical pneumonitis, and pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

### ROUTE OF EXPOSURE

Multiple Routes: Harmful if swallowed, inhaled, or absorbed through skin. Causes burns.

# 12 - Ecological Information

No data available.

# 13 - Disposal Considerations

### SUBSTANCE DISPOSAL

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

### 14 - Transport Information

#### RID/ADR

UN#: 2920 Class: 8 PG: II

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Proper Shipping Name: Corrosive liquid, flammable,
   n.o.s.
IMDG
  UN#: 2920
   Class: 8
  PG: II
   Subrisk: 3
   Proper Shipping Name: CORROSIVE LIQUID, FLAMMABLE,
   N.O.S.
   Marine Pollutant: No
   Severe Marine Pollutant: No
   Technical Name: Required
IATA
  UN#: 2920
  Class: 8
   PG: II
   Subrisk: 3
   Proper Shipping Name: Corrosive liquid, flammable,
```

# 15 - Regulatory Information

Technical Name: Required

Inhalation Packing Group I: No

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CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES
  INDICATION OF DANGER: C
    Corrosive.
  R-PHRASES: 34-37
    Causes burns. Irritating to respiratory system.
  S-PHRASES: 26-36/37/39-45
     In case of contact with eyes, rinse immediately with plenty of
    water and seek medical advice. Wear suitable protective
    clothing, gloves, and eye/face protection. In case of accident
    or if you feel unwell, seek medical advice immediately (show
    the label where possible).
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### COUNTRY SPECIFIC INFORMATION

## Germany WGK: 1

### 16 - Other Information

### WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a quide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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