

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifiers**Product name: **ACETYL CHLORIDE**CAS-No.: **75-36-5**Product Number: **A65535****1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified uses: Laboratory chemicals, Manufacture of substances

**1.3 Details of the supplier of the safety data sheet**Company : Philip Harris Ltd., 2 Gregory Street, Hyde, Cheshire, SK14 4HR,  
UNITED KINGDOM

Telephone: +44 (0)845 1200 506 Fax: +44 (0)161 367 2140

Email: enquiries@philipharris.co.uk

**1.4 Emergency telephone number**Emergency Phone #: **+44 (0)845 1200 506****2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**

Flammable liquids (Category 2)

Skin corrosion (Category 1B)

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Highly flammable. Reacts violently with water. Causes burns.

**2.2 Label elements****Labelling according Regulation (EC) No 1272/2008 [CLP]**

Pictogram:

Signal word: **Danger**

Hazard statement(s):

H225 **Highly flammable liquid and vapour.**H314 **Causes severe skin burns and eye damage**

Precautionary statement(s):

P210 **Keep away from heat/sparks/open flames/hot surfaces.**P280 **Wear protective gloves/ protective clothing/ eye protection/ face protection.**

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.

Supplemental Hazard Statements:

EUH014 Reacts violently with water.

**According to European Directive 67/548/EEC as amended.**

R-phrases(s)

R11 Highly flammable.

R14 Reacts violently with water.

R34 Causes burns.

S-phrases(s)

S9 Keep container in a well-ventilated place.

S16 Keep away from sources of ignition.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

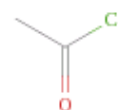
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**2.3 Other hazards** – Irritating to eyes and skin.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

**Acetyl chloride**



Formula: **C<sub>2</sub>H<sub>3</sub>ClO**

Molecular Weight: **78.5g/mol**

Component Concentration: -

CAS-No.: **75-36-5**

EC-No.: **200-865-6**

Index-No.: **607-011-00-5**

#### **4. FIRST AID MEASURES**

##### **4.1 Description of first aid measures**

###### **General advice:**

Consult a physician. Show this safety data sheet to the doctor in attendance.

###### **If inhaled:**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

###### **In case of skin contact:**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

###### **In case of eye contact:**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

###### **If swallowed:**

Do NOT induce vomiting. 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**

no data available

##### **4.3 Indication of immediate medical attention and special treatment needed**

no data available

#### **5. FIRE-FIGHTING MEASURES**

##### **5.1 Extinguishing media**

###### **Suitable extinguishing media**

Dry powder Carbon dioxide (CO<sub>2</sub>)

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

Carbon oxides, Nature of decomposition products not known. Carbon oxides, Hydrogen chloride gas

##### **5.3 Precautions for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

##### **5.4 Further information**

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

## **6. ACCIDENTAL RELEASE MEASURES**

### **6.1 *Personal precautions, protective equipment and emergency procedures***

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

### **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 materials for containment and cleaning up***

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 (see section 13). Do not flush with water.

### **6.4 *Reference to other sections***

For disposal see section 13.

## **7. HANDLING AND STORAGE**

### **7.1 *Precautions for safe handling***

Avoid inhalation of vapour or mist. Keep away from sources of ignition. Take measures to prevent the build up of electrostatic charge.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from water. Never allow product to get in contact with water during storage. Hydrolyses readily. Handle and store under inert gas.

### **7.3 *Specific end uses***

no data available

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

### **8.2 Exposure controls**

#### **Appropriate engineering controls**

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

#### **Personal protective equipment**

##### **Eye/face protection**

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### **Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- a) Appearance:           **Form:** Liquid           **Colour:** Colourless / Clear
- b) Odour:                           Pungent
- c) Odour Threshold:           no data available
- d) pH:                               no data available
- e) Melting/freezing point:   Melting point/range: -112°C
- f) Initial boiling point and boiling range: 52°C
- g) Flash point:                   5°C
- h) Evaporation rate:           no data available
- i) Flammability (solid, gas):   no data available
- j) Upper/lower flammability or explosive limits: 7.3-19%(V)
- k) Vapour pressure:           805.765hPa at 20°C 2228.432hPa at 55°C
- l) Vapour density:               2.71
- m) Relative density:           1.104g/cm<sup>3</sup> at 25°C
- n) Water solubility:           no data available
- o) Partition coefficient: n-octanol/water: no data available
- p) Autoignition temperature: 390°C
- q) Decomposition temperature: no data available
- r) Viscosity:                     no data available
- s) Explosive properties:       no data available
- t) Oxidizing properties:       no data available

### 9.2 Other safety information

no data available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

Reacts violently with water.

### 10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight. Exposure to moisture.

### 10.5 Incompatible materials

Water, Alcohols, Oxidizing agents, Strong bases

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

## 11. TOXICOLOGICAL INFORMATION

### 11.1 *Information on toxicological effects*

#### **Acute toxicity**

LD50 Oral - rat - 910 mg/kg

Remarks: Peripheral Nerve and Sensation: Spastic paralysis with or without sensory change.

Behavioural: Excitement. Lungs, Thorax, or Respiration: Other changes.

#### **Skin corrosion/irritation**

no data available

#### **Serious eye damage/eye irritation**

no data available

#### **Respiratory or skin sensitization**

no data available

#### **Germ cell mutagenicity**

no data available

#### **Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### **Reproductive toxicity**

no data available

#### **Specific target organ toxicity - single exposure**

no data available

#### **Specific target organ toxicity - repeated exposure**

no data available

#### **Aspiration hazard**

no data available

#### **Potential health effects**

**Inhalation** May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

**Ingestion** May be harmful if swallowed. Causes burns.

**Skin** May be harmful if absorbed through skin. Causes skin burns.

**Eyes** May cause eye irritation.

#### **Signs and Symptoms of Exposure**

no data available

#### **Additional Information**

RTECS: AO6390000

## **12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

Toxicity to fish LC50 - *Pimephales promelas* (fathead minnow) - 42 mg/l - 96 h

### **12.2 Persistence and degradability**

no data available

### **12.3 Bioaccumulative potential**

no data available

### **12.4 Mobility in soil**

no data available

### **12.5 Results of PBT and vPvB assessment**

no data available

### **12.6 Other adverse effects**

Harmful to aquatic life

## **13. DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

#### **Contaminated packaging**

Dispose of as unused product.



## 14. TRANSPORT INFORMATION

### 14.1 UN-Number

ADR/RID: 1717 IMDG: 1717 IATA: 1717

### 14.2 UN proper shipping name

ADR/RID: ACETYL CHLORIDE

IMDG: ACETYL CHLORIDE

IATA: ACETYL CHLORIDE

### 14.3 Transport hazard class(es)

ADR/RID: 3(8) IMDG: 3(8) IATA: 3(8)

### 14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

### 14.6 Special precautions for users

no data available

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

### 15.2 Chemical Safety Assessment

no data available

## 16. OTHER INFORMATION

no data available