ACETYL CHLORIDE

0210
October 1995

CAS No: 75-36-5
RTECS No: AO6390000
UN No: 1717
EC No: 607-011-00-5

Acetic chloride
Ethanoyl chloride
Acetic acid chloride
CH_3COCl / C_2ClH_3O
Molecular mass: 78.5

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Highly flammable. Many reactions may cause fire or explosion. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking. NO contact with hot surfaces.	Powder, carbon dioxide. NO hydrous agents. NO water.
EXPLOSION	Vapour/air mixtures are explosive.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Prevent build-up of electrostatic charges (e.g., by grounding). Do NOT use compressed air for filling, discharging, or handling. Use non-sparking handtools.	In case of fire: cool drums, etc., by spraying with water but avoid contact of the substance with water.

EXPOSURE		AVOID ALL CONTACT!	IN ALL CASES CONSULT A DOCTOR!
Inhalation	Burning sensation. Cough. Shortness of breath. Sore throat.	Breathing protection. Closed system and ventilation.	Fresh air, rest. Half-upright position. Artificial respiration may be needed. Refer for medical attention.
Skin	Dry skin. Redness. Serious skin burns. Burning sensation. Pain. Blisters.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
Eyes	Redness. Pain. Severe deep burns.	Safety spectacles, face shield, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Abdominal pain. Burning sensation. Cough. Shortness of breath. Sore throat. (Further see Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Give nothing to drink. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING	
Evacuate danger area! Consult an expert! Collect leaking liquid in sealable containers. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT wash away into sewer. Personal protection: complete protective clothing including self-contained breathing apparatus.	F Symbol C Symbol R: 11-14-34 S: (1/2-)9-16-26-45 UN Hazard Class: 3 UN Subsidiary Risks: 8 UN Pack Group: II	Airtight. Unbreakable packaging; put breakable packaging into closed unbreakable container.

EMERGENCY RESPONSE	SAFE STORAGE
Transport Emergency Card: TEC (R)-30S1717 NFPA Code: H3; F3; R2; W	Fireproof. Separated from incompatible materials. See Chemical Dangers. Dry. Well closed.

IPCS
International Programme on Chemical Safety

Prepared in the context of cooperation between the International Programme on Chemical Safety and the European Commission

SEE IMPORTANT INFORMATION ON THE BACK.

IMPORTANT DATA

Physical State; Appearance
COLOURLESS FUMING LIQUID, WITH PUNGENT ODOUR.

Physical dangers
The vapour is heavier than air and may travel along the ground; distant ignition possible.

Chemical dangers
The substance decomposes on heating and on burning producing toxic and corrosive fumes including hydrogen chloride (see ICSC 0163), phosgene (see ICSC 0007). Reacts violently with water, alcohols, acids, bases, certain powdered metals and many other compounds causing fire and explosion hazard. Attacks many metals in presence of water. Products of hydrolysis in water include corrosive hydrochloric acid and acetic acid.

Occupational exposure limits
TLV not established.
MAK not established.

Routes of exposure
The substance can be absorbed into the body by inhalation of its vapour and by ingestion.

Inhalation risk
A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20/C.

Effects of short-term exposure
The vapour is irritating to the eyes and the respiratory tract. The substance is corrosive to the eyes and the skin. Corrosive on ingestion. Inhalation of the vapour may cause lung oedema (see Notes). Exposure may result in unconsciousness. The effects may be delayed. Medical observation is indicated.

Effects of long-term or repeated exposure
Repeated or prolonged contact with skin may cause dermatitis. Lungs may be affected by inhalation of high concentrations of the vapour.

PHYSICAL PROPERTIES

Boiling point: 51/C
Melting point: -112/C
Relative density (water = 1): 1.11
Solubility in water: reaction
Vapour pressure, kPa at 20/C: 32
Relative vapour density (air = 1): 2.7
Flash point: 5/C c.c.
Auto-ignition temperature: 390/C
Explosive limits, vol% in air: 7.3-19

ENVIRONMENTAL DATA

This substance may be hazardous to the environment; special attention should be given to water.

NOTES

Reacts violently with fire extinguishing agents such as hydrous agents (water, foam).
The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential.
Immediate administration of an appropriate inhalation therapy by a doctor or a person authorized by him/her, should be considered.
Do NOT use in the vicinity of a fire or a hot surface, or during welding.
Card has been partly updated in October 2004. See sections Occupational Exposure Limits, EU classification, Emergency Response.

ADDITIONAL INFORMATION