

CHLOROBENZENE

0642

November 2003

CAS No: 108-90-7
RTECS No: CZ0175000
UN No: 1134
EC No: 602-033-00-1

Benzene chloride
Chlorobenzol
Phenyl chloride
C₆H₅Cl
Molecular mass: 112.6

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Flammable. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking.	Powder, water spray, foam, carbon dioxide.
EXPLOSION	Above 27°C explosive vapour/air mixtures may be formed.	Above 27°C use a closed system, ventilation, and explosion-proof electrical equipment.	In case of fire: keep drums, etc., cool by spraying with water.

EXPOSURE			
Inhalation	Drowsiness. Headache. Nausea. Unconsciousness.	Ventilation, local exhaust, or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Redness. Dry skin.	Protective gloves.	Refer for medical attention.
Eyes	Redness. Pain.	Safety goggles, 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. (See Inhalation).	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Ventilation. Remove all ignition sources. Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. Do NOT let this chemical enter the environment. (Extra personal protection: filter respirator for organic gases and vapours.)	Xn Symbol N Symbol R: 10-20-51/53 S: (2-)24/25-61 UN Hazard Class: 3 UN Pack Group: III

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-30S1134 NFPA Code: H2; F3; R0	Fireproof. Separated from strong oxidants.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS LIQUID, WITH CHARACTERISTIC ODOUR.

Chemical dangers

The substance decomposes on heating, on contact with hot surfaces or flames producing toxic and corrosive fumes. Reacts violently with strong oxidants causing fire and explosion hazard. Attacks rubber and some plastic.

Occupational exposure limits

TLV: 10 ppm as TWA; A3; BEI issued; (ACGIH 2003).
MAK: 10 ppm, 47 mg/m³; Peak limitation category: II(2);
Pregnancy risk group: C; (DFG 2003).

Routes of exposure

The substance can be absorbed into the body by inhalation of its vapour, through the skin and by ingestion.

Inhalation risk

A harmful contamination of the air can be reached rather quickly on evaporation of this substance at 20°C.

Effects of short-term exposure

The substance is irritating to the eyes and the skin. If this liquid is swallowed, aspiration into the lungs may result in chemical pneumonitis. The substance may cause effects on the central nervous system, resulting in lowering of consciousness.

Effects of long-term or repeated exposure

The liquid defats the skin. The substance may have effects on the liver and kidneys.

PHYSICAL PROPERTIES

Boiling point: 132°C

Melting point: -45°C

Relative density (water = 1): 1.11

Solubility in water, g/100 ml at 20°C: 0.05

Vapour pressure, kPa at 20°C: 1.17

Relative vapour density (air = 1): 3.88

Relative density of the vapour/air-mixture at 20°C (air = 1): 1.03

Flash point: 27°C c.c.

Auto-ignition temperature: 590°C

Explosive limits, vol% in air: 1.3-11

Octanol/water partition coefficient as log Pow: 2.18-2.84

ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms. It is strongly advised that this substance does not enter the environment.

NOTES

Do NOT use in the vicinity of a fire or a hot surface, or during welding.

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible for the use which might be made of this information