

Common Name: **CHLOROBENZENE**

Synonyms: Benzene Chloride; Phenyl Chloride

CAS No: 108-90-7

Molecular Formula: C₆H₅Cl

RTK Substance No: 0379

Description: Colorless to yellowish liquid with an almond-like odor

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
3 - Health 3 - Fire 0 - Reactivity DOT#: UN 1134 ERG Guide #: 130 Hazard Class: 3 (Flammable)	FLAMMABLE LIQUID Use dry chemical, CO ₂ or foam as extinguishing agents. Water may not be effective in fighting fires, but may be used to blanket fire. POISONOUS GASES ARE PRODUCED IN FIRE, including <i>Hydrogen Chloride</i> and <i>Phosgene</i> . CONTAINERS MAY EXPLODE IN FIRE. Use water spray to keep fire-exposed containers cool. Flow or agitation may generate electrostatic charges.	Chlorobenzene may react explosively with <i>powdered</i> SODIUM and mixtures of PHOSPHORUS TRIFLUORIDE and SODIUM. Chlorobenzene may react violently with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); ALKALI METALS (such as LITHIUM, ALUMINUM and POTASSIUM); NITRIC ACID; and DIMETHYL SULFOXIDE.

SPILL/LEAKS

Isolation Distance:

Small Spill: 50 meters (150 feet)

Large Spill: 300 meters (1,000 feet)

Fire: 800 meters (1/2 mile)

Absorb liquids in vermiculite, dry sand, earth, or a similar material and place into sealed containers for disposal.

Use only non-sparking tools and equipment, especially when opening and closing containers of **Chlorobenzene**.

Keep **Chlorobenzene** out of confined spaces, such as sewers, because of the possibility of an explosion.
DO NOT wash into sewer.

Chlorobenzene is harmful to aquatic life in very low concentrations.

PHYSICAL PROPERTIES

Odor Threshold:	Almond-like odor
Flash Point:	82°F (28°C)
LEL:	1.3%
UEL:	9.6%
Auto Ignition Temp:	1,099°F (593°C)
Vapor Density:	3.9 (air = 1)
Vapor Pressure:	8.8 mm Hg at 68°F (20°C)
Specific Gravity:	1.1 (water = 1)
Water Solubility:	Very slightly soluble
Boiling Point:	270°F (132°C)
Freezing Point:	-50°F (-46°C)
Ionization Potential:	9.1 eV
Molecular Weight:	112.6

EXPOSURE LIMITS

OSHA: 75 ppm, 8-hr TWA

ACGIH: 10 ppm, 8-hr TWA

IDLH: 1,000 ppm

The Protective Action Criteria values are:

PAC-1 = 10 ppm

PAC-2 = 150 ppm

PAC-3 = 400 ppm

PROTECTIVE EQUIPMENT

Gloves:	Polyvinyl Alcohol, Silver Shield®/4H®, Viton and Barrier® (>8-hr breakthrough)
Coveralls:	Tychem® CPF 4, BR, LV, Responder®, and TK; and Trelchem® HPS and VPS (>8-hr breakthrough)
Respirator:	>10 ppm - Supplied air or SCBA

HEALTH EFFECTS

Eyes: Irritation

Skin: Irritation, rash and burning feeling

Inhalation: Nose and throat irritation
Headache, dizziness, lightheadedness, and passing out

FIRST AID AND DECONTAMINATION

Remove the person from exposure.

Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.

Quickly remove contaminated clothing and wash contaminated skin with large amounts of soap and water.

Begin artificial respiration if breathing has stopped and CPR if necessary.

Transfer promptly to a medical facility.