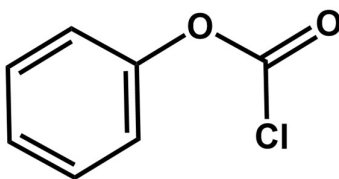


DATA SHEET Nr 5900 F
PHENYL CHLOROFORMATE
PCF



Molecular formula: C₇H₅ClO₂

Molecular weight: 156.5

CAS number: 1885-14-9

EC number: 217-547-8

SYNONYMS

Carbonochloridic acid, phenyl ester
 Phenyl carbonochloridate

APPEARANCE

Clear liquid with pungent odor.

PHYSICAL PROPERTIES

Density (20 °C): 1.24 g/cm³

Melting Point: -38 °C

Boiling point: 185 °C (101 kPa)

Solubility:

Soluble in usual organic solvents: (acetone, chloroform, toluene, THF).

CHEMICAL PROPERTIES

- Reacts by hydrolysis to yield hydrochloric acid, phenol and carbon dioxide.
- Reacts with amines yielding phenyl carbamates
- Reacts with alcohols to yield phenyl carbonates.

USES

- Integral in the syntheses of polycarbonate materials and polyaromatic resins.
- Used as a building block in a range of pharmacological syntheses frequently involving carbonate, carbamate or urea functionalities

PHENYL CHLOROFORMATE PCF

SPECIFICATION

Parameter	Guaranteed value	Method	Operating procedure
Appearance	Clear liquid	Visual	
Color	≤ 50 APHA	Colorimetry	C – 210
Purity	≥ 99.0 %	Gas chromatography	GC – 267
Phosgene	≤ 0.05 %	Iodometry	I – 230
Hydrogen chloride	≤ 0.1 %	Acidimetry	A – 220
Phenol	≤ 0.2 %	Gas chromatography	GC – 267
Diphenyl carbonate	≤ 0.2 %	Gas chromatography	GC – 267

PACKAGING

Polyethylene lined metal drum containing 200 kg.

Bulk

HANDLING PRECAUTIONS

- Physicochemical hazard:
Flash point (closed cup): 69 °C
- Health hazards:
LD 50 (oral, rat): 1580 mg/kg

Corrosive; irritating to skin, mucous membranes and eyes

- Recommended:
Avoid contact with metals that catalyze decomposition.

Approved safety eyewear, chemically resistant gloves and laboratory-appropriate chemical resistant clothing are recommended when handling

In case of contact with eyes, flush for a minimum of 15 minutes with fresh water and contact a physician.

In case of acute inhalation, remove the contaminated individual to fresh air and seek medical assistance.

- Neutralization:
Neutralize by reaction with cold alkaline solutions.

STORAGE

The product is stable if stored in its closed original drum in a covered, dry, cool and well-ventilated area, protected from exposure to direct sunlight.

In the case of prolonged storage, re-analyze for the presence of HCl and phenol prior to use

TRANSPORTATION

Refer to MSDS