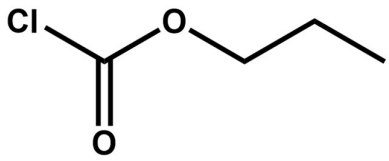
FramoChem
A VanDeMark – Company

DATA SHEET Nr 2050 G

n-PROPYL CHLOROFORMATE
NPCF



Molecular formula: $C_4H_7ClO_2$
Molecular weight: 122.5
CAS number: 109-61-5
EC number: 203-687-7

SYNONYMS

Carbonochloridic acid, n-propyl ester
Propyl carbonochloridate
Propan-1-yl chloroformate

APPEARANCE

Clear liquid with pungent odor.

PHYSICAL PROPERTIES

Density (20 °C):	1.09 g/cm^3
Melting Point:	−61 °C
Boiling point:	112 °C (101 kPa)

Solubility:

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

CHEMICAL PROPERTIES

- Reacts by hydrolysis to yield hydrochloric acid, propanol and carbon dioxide.
- Reacts with amines yielding n-propyl carbamates
- Reacts with alcohols to yield n-propyl carbonates.

USES

- Used for derivatization of analytes in chromatographic analysis
- Component in the syntheses of asymmetric carbonates utilized as solvents and battery electrolyte materials
- Used as a building block in a range of pharmacological syntheses frequently involving n-propyl carbonates or carbamate functionalities

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SPECIFICATION

Parameter	Guaranteed value	Method	Operating procedure
Appearance	Clear liquid	Visual	
Color	≤ 30 APHA	Colorimetry	C – 210
Purity	≥ 99.0 %	Gas chromatography	GC – 246
Phosgene	≤ 0.1 %	Iodometry	I – 230
Hydrogen chloride	≤ 0.1 %	Acidimetry	A – 220
n-Propanol	≤ 0.1 %	Gas chromatography	GC – 246
Dipropyl carbonate	≤ 1.0 %	Gas chromatography	GC – 246

PACKAGING

Polyethylene lined metal drum containing 200 kg.

HANDLING PRECAUTIONS

- Physicochemical hazard:
  Flash point (closed cup): 26 °C

- Health hazards:
  LD 50 (oral, rat): 1210 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.

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

TRANSPORTATION

Refer to MSDS

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