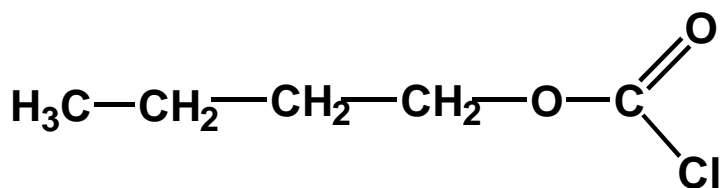


DATA SHEET Nr 2080 F

n-BUTYL CHLOROFORMATE

NBCF



Molecular formula:	$\text{C}_5\text{H}_9\text{ClO}_2$
Molecular weight:	136.5
CAS number:	592-34-7
EC number:	209-750-5

SYNONYM

Carbonochloridic acid, n-butyl ester.

APPEARANCE

Clear liquid with pungent odor.

PHYSICAL PROPERTIES

Density (20 °C): 1.06 g/cm³

Boiling point: 142 °C / 101 kPa

Melting point: < - 30 °C

Solubility:

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

CHEMICAL PROPERTIES

- Reacts by hydrolysis yielding hydrochloric acid, carbon dioxide and n-butanol.
- Reacts with alcohols yielding carbonates.
- Reacts with amines yielding carbamates.

USES

- Organic synthesis intermediate.

n-BUTYL CHLOROFORMATE

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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 – 245
Phosgene	≤ 0.1 %	Iodometry	I – 230
Hydrogen chloride	≤ 0.1 %	Acidimetry	A – 220
n-Butanol	≤ 0.2 %	Gas chromatography	GC – 245
Dibutyl carbonate	≤ 1.0 %	Gas chromatography	GC – 245

PACKAGING

Polyethylene lined metal drum containing 200 kg.

HANDLING PRECAUTIONS

- Physicochemical hazard:
Flash point (closed cup): 38 °C
- Health hazards:
LD 50 (oral, rat): 1325 mg/kg
- Recommended:
Avoid contact with metallic compounds which catalyze its decomposition.
When handling this product wear gloves, goggles, mask and protective clothes.
If eyes or skin are contaminated wash immediately with clean water for at least 15 minutes. In case of inhalation of concentrated vapors take person to fresh air. In all cases consult a physician.

- Neutralization:
Neutralize by reaction with an alkaline solution.

STORAGE

Stored in its closed original drum, protected from direct sunshine, in a covered, dry, cool and well-ventilated warehouse the product is stable. However, in case of prolonged storage it is recommended to check again the product before use by measuring typical parameters of its quality such as color, hydrogen chloride and n-butanol levels.

TRANSPORTATION

Refer to MSDS.