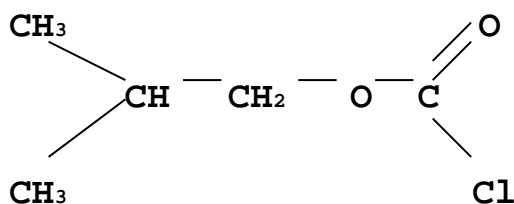


DATA SHEET Nr 2300 E

i – BUTYL CHLOROFORMATE



Molecular formula: $C_5H_9ClO_2$

Molecular weight: 136.5

CAS number: 543-27-1

EC number: 208-840-1

SYNONYM

Carbonochloridic acid, iso-butyl ester.

ASPECT

Colorless liquid with a pungent odor.

PHYSICAL PROPERTIES

Density d_{420} : 1.05

Boiling point: 130 °C

Solubility:

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

CHEMICAL PROPERTIES

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

USES

- Organic synthesis intermediate.
- Synthesis intermediate for pharmaceuticals and fine chemicals.

i-BUTYL CHLOROFORMATE

SPECIFICATION

Parameter	Guaranteed Value	Method	Operating Procedure
Aspect	Clear liquid		
Color	≤ 30 APHA	Colorimetric	C-210
Iso Butyl chloroformate	≥ 99,0 %	Gas chromatography	GC-240
Phosgene	≤ 0,1 %	Iodometry	I-230
Hydrogen chloride	≤ 0,1 %	Acidimetric	A-220
Iso Butyl alcohol	≤ 0,2 %	Gas chromatography	GC-240
Di-i-butyl carbonate	≤ 0,5 %	Gas chromatography	GC-240

PACKAGING

Polyethylene lined metal drums containing 200 kg.

HANDLING PRECAUTIONS

- Physical-chemical hazard
Flash point (tag closed cup): 46 °C
- Health hazards
LD 50 (ingestion rat): 1400 mg/kg = harmful.
- 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 both cases, consult a physician.
- Neutralization
Neutralize by reaction with a basic solution.

STORAGE

Stored in its closed original drum, 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 qualitative evolution such as the color, the hydrochloric acid and alcohol levels.

TRANSPORT

Refer to MSDS.

Nr 2300 E — May, 2016