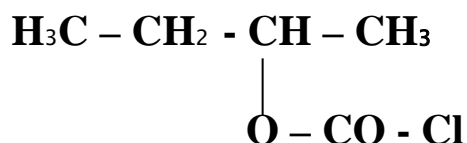


DATA SHEET Nr 2600 E

## Sec– BUTYL CHLOROFORMATE



Molecular formula:  $\text{C}_5\text{H}_9\text{ClO}_2$

Molecular weight: 136.5

CAS number: 17462-58-7

EC number: 241-475-6

### SYNONYM

Carbonochloridic acid, sec-butyl ester.

### ASPECT

Colorless liquid with a pungent odor.

### PHYSICAL PROPERTIES

Density  $d_{420}$ : 1.05

Boiling point: 121 °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 s-butanol.
- Reacts with alcohols yielding carbonates.
- Reacts with amines yielding carbamates.

### USES

- Organic synthesis intermediate.

## Sec-BUTYL CHLOROFORMATE

### SPECIFICATION

Parameter	Guaranteed Value	Method	Operating Procedure
Aspect	Clear liquid		
Color	≤ 30 APHA	Colorimetry	C-210
Sec-butyl chloroformate	≥ 99,0 %	Gas chromatography	GC-240
Phosgene	≤ 0,1 %	Iodometry	I-230
Hydrogen chloride	≤ 0,1 %	Acidimetry	A-220
Sec-butyl alcohol	≤ 0,5 %	Gas chromatography	GC-240
Iron	≤ 1 ppm	Colorimetry	C-810

### PACKAGING

Polyethylene lined metal drums containing 200 kg.

### HANDLING PRECAUTIONS

- Physico-chemical hazard  
Flash point (tag closed cup): 35 °C
- Health hazards  
LD 50 (ingestion rat): 450 mg/kg = toxic.
- 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

The product is not very stable at room temperature. The rate of decomposition increases by the temperature. Therefore it has to be stored under refrigeration 0 °C in its original, closed packaging. In contact with moisture metals or metallic compounds it decomposes yielding hydrochloric acid or carbon dioxide what can increase the inner pressure of the drum therefore it has to be opened with care.

### TRANSPORT

Refer to MSDS.

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