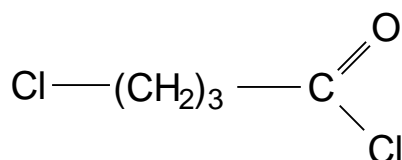


DATA SHEET Nr 1010 F

4-CHLORO-BUTYRYL CHLORIDE



Molecular formula: C₄H₆Cl₂O

Molecular weight: 141

CAS number: 4635-59-0

EU number: 2250591

synonym

Gamma-chloro-butyryl chloride.

aspect

Clear liquid with a pungent odor.

physical properties

Density d_4^{20} : 1.26

Boiling point: 173 °C at 10⁵ Pa

Melting point: - 47 °C

Solubility:

- Soluble in the main common organic solvents (acetone, toluene, methylene chloride, THF, dioxane, dichloro-ethane, chlorobenzene, ethyl acetate).
- Insoluble in water.

chemical properties

- Reacts by hydrolysis, yielding hydrochloric acid and 4-chloro-butyric acid.
- Reacts with amines yielding amides.
- Reacts with alcohols yielding esters.

uses

- Synthesis intermediate for pharmaceuticals and fine chemicals.
- Synthesis intermediate for polymerization initiators.

4-CHLORO-BUTYRYL CHLORIDE — Framochem

specifications

Parameter	Guaranteed Value	Method	Operating Procedure
Aspect	Clear liquid		
Color	≤ 50 apha	Colorimetry	C-210
Assay	≥ 98.0 %	Gas chromatography	GC-420
Phosgene	≤ 0.1 %	Iodometry	I-230
Hydrogen chloride	≤ 0.1 %	Acidimetry	A-220
Butyrolactone	≤ 1 %	Gas chromatography	GC-420
4-Chlorobutyric acid	≤ 0.5 %	Gas chromatography	GC-420
Anhydride	≤ 1 %	Gas chromatography	GC-420
Iron	≤ 5 ppm	Colorimetry	C-810

packaging

Polyethylene lined metal drum containing 220 kg.

Polyethylene drum containing 220 kg.

handling precautions

- Physico-chemical hazard
Flash point (tag closed cup): 85°C
- Health hazards
LD 50 (ingestion rat): 1100 mg/kg =
= harmful.
Irritating action on skin and mucous membranes.
Corrosive.
- Recommended
When handling this product, wear mask, gloves, goggles and protective clothes.
Wash contaminated surfaces immediately

with plenty of water.

In case of inhalation take person to fresh air.
(Call a physician.)

- Neutralization
Neutralize with caustic 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 (more than 6 months), it is recommended to check again the product before use, by measuring typical parameters of its quality such as the color, 4-chlorobutyric acid, hydrochloric acid and anhydride levels.

transport

See MSDS

Nr 1010 F— October, 2014