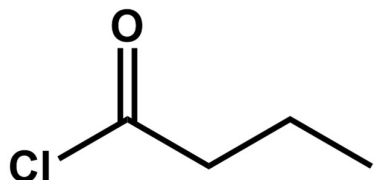


DATA SHEET Nr 1020 D

BUTYRYL CHLORIDE

BUCL



Molecular formula:	C ₄ H ₇ ClO
Molecular weight:	106.5
CAS number:	141-75-3
EC number:	205-498-5

SYNONYM

n-Butyryl chloride
Butanoyl chloride
Butanoic acid chloride

APPEARANCE

Clear liquid with pungent odor.

PHYSICAL PROPERTIES

Density (20 °C): 1.03 g/cm³
Melting point: - 89 °C
Boiling point: 101 – 103 °C/101 kPa

Solubility:

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

CHEMICAL PROPERTIES

- Hydrolyzes to butyric acid and hydrochloric acid.
- Reacts with amines yielding butamates.
- Reacts with alcohols yielding butanamides.
- Reacts with mercaptanes yielding butylthioesters.

USES

- Intermediate for organic synthesis, especially for pharmaceuticals.
- Important in the syntheses of photopolymerization sensitizers and catalysts.
- Frequent component of thermoplastic resins.

BUTYRYL CHLORIDE BUCL

SPECIFICATION

Parameter	Guaranteed value	Method	Operating procedure
Appearance	Clear liquid	Visual	
Color	≤ 20 APHA	Colorimetry	C – 210
Purity	≥ 98.0 %	Gas chromatography	GC – 410
Phosgene	≤ 0.1 %	Iodometry	I – 230
Acidity (HCl)	≤ 0.1 %	Acidimetry	A – 220

PACKAGING

Polyethylene drum containing 200 kg.

HANDLING PRECAUTIONS

- Physicochemical hazard:
Flash point (closed cup): 18 °C
Flammable liquid.
- Health hazards:
LD 50 (dermal, rabbit): 2000 mg/kg
Corrosive: causes burns.
Irritating on skin, mucous membranes and eyes.
- Recommended:
When handling, wear approved gloves, safety eye-wear and chemical-resistant laboratory approved clothing.

For contact with eye, wash immediately with clean water for at least 15 minutes and contact a physician.

In the case of acute inhalation, remove the contaminated individual to fresh air immediately and contact a physician

- Neutralization:

Neutralize with a cold alkaline solution.

STORAGE

The product is stable if stored in its closed original packaging in a covered, dry, cool and well-ventilated area.

In case of prolonged storage it is recommended to re-analyze the product prior use by checking for changes in color, hydrogen chloride, butyric acid and anhydride levels.

TRANSPORTATION

Refer to MSDS.

