SYNONYM
n-Butyryl 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
Flash point: 18 °C
Solubility:
Soluble in usual organic solvents (acetone, chloroform, toluene, THF).

CHEMICAL PROPERTIES
- Reacts by hidrolysis yielding hydrochloric acid and butyric acid.
- Reacts with amines yielding amides.
- Reacts with alcohols yielding esters.
- Reacts with mercaptanes yielding esters.

USES
- Intermediate for organic synthesis (especially for pharmaceuticals).
BUTYRYL CHLORIDE
BUCL

SPECIFICATION

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

PACKAGING
Polyethylene drum containing 200 kg.

HANDLING PRECAUTIONS

- Physicochemical hazard:
  Flash point (closed cup): 18 °C
  Flammable.

- Health hazards:
  LD 50 (dermal, rabbit): 2000 mg/kg
  Corrosive: causes burns.
  Irritating on skin, mucous membranes and eyes.

- Recommended:
  Wear gloves, glasses, mask and protective clothes.
  If eyes are contaminated wash immediately with clean water for at least 15 minutes.
  If concentrated vapors are inhaled carry the person into fresh air out of the contaminated area.
  In both cases call a physician.

- Neutralization:
  Neutralize with an alkaline 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 quality (color, hydrogen chloride, butyric acid and anhydride levels).

TRANSPORTATION
Refer to MSDS.

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