5-CHLOROVALEREOYL CHLORIDE

5 CVCL

SYNONYM
5-Chloropentanoyl chloride

APPEARANCE
Clear liquid with pungent odor.

PHYSICAL PROPERTIES
Density (20 °C): 1.21 g/cm³
Boiling point: 83 °C/2 kPa

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

CHEMICAL PROPERTIES
- Reacts by hydrolysis yielding hydrochloric acid and 5-chlorovaleric acid.
- Reacts with amines yielding amides.
- Reacts with alcohols yielding esters.
- Reacts with mercaptanes yielding thioesters.

USES
- Intermediate for organic synthesis.
5-CHLOROVALEROYL CHLORIDE
5CVCL

SPECIFICATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Guaranteed value</th>
<th>Method</th>
<th>Operating procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
<td>Visual</td>
<td></td>
</tr>
<tr>
<td>Purity</td>
<td>≥ 99.0 %</td>
<td>Gas chromatography</td>
<td>GC – 546</td>
</tr>
<tr>
<td>Other impurities (each)</td>
<td>≤ 0.5%</td>
<td>Gas chromatography</td>
<td>GC – 546</td>
</tr>
</tbody>
</table>

PACKAGING
Polyethylene lined metal drum containing 50 kg.

HANDLING PRECAUTIONS
- **Physicochemical hazard:**
  Flash point (closed cup): 105 °C
- **Health hazards:**
  LD 50 (oral, rat): 500 – 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 by reaction 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 quality parameters (color, hydrogen chloride, 5-chlorovaleric acid and anhydride levels).

TRANSPORTATION
Refer to MSDS.

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