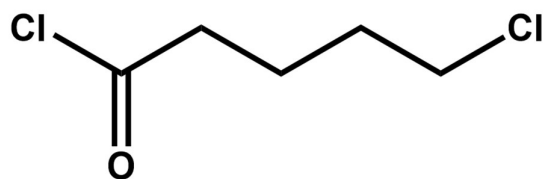


DATA SHEET Nr 1930 E

**5-CHLOROVALEROYL CHLORIDE**  
**5 CVCL**



Molecular formula:	C <sub>5</sub> H <sub>8</sub> Cl <sub>2</sub> O
Molecular weight:	155.0
CAS number:	1575-61-7
EC number:	216-403-1

**SYNONYM**

5-Chloropentanoyl chloride

**APPEARANCE**

Clear liquid with pungent odor.

**PHYSICAL PROPERTIES**

Density (20 °C): 1.21 g/cm<sup>3</sup>

Boiling point: 83 °C/2 kPa

Solubility:

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

**CHEMICAL PROPERTIES**

- Hydrolyzes to yield hydrochloric acid and 5-chlorovaleric acid.
- Reacts with amines to yield 5-chloropentyl amides.
- Reacts with alcohols to yield 5-chloropentyl esters.
- Reacts with mercaptans to yield 5-chloropentyl thioesters.

**USES**

- Precursor used in a wide variety of pharmaceutical syntheses.
- Frequently employed for the syntheses of lactams or compounds containing similar units.

## 5-CHLOROVALEROYL CHLORIDE

### 5CVCL

#### SPECIFICATION

Parameter	Guaranteed value	Method	Operating procedure
Appearance	Clear liquid	Visual	
Purity	≥ 99.0 %	Gas chromatography	GC – 546
Other impurities (each)	≤ 0.5%	Gas chromatography	GC – 546

#### 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:  
Approved safety eyewear, chemically resistant gloves and laboratory-appropriate chemical resistant clothing are recommended when handling  
  
In case of contact with eyes, flush for a minimum of 15 minutes with fresh water and contact a physician,  
  
In case of acute inhalation, remove the contaminated individual to fresh air and seek medical assistance.

- 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.