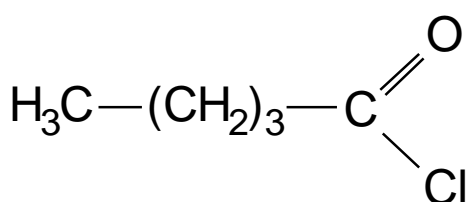


DATA SHEET Nr 1630 C
VALEROYL-CHLORIDE
EXTRA



Molecular formula:	C ₅ H ₉ ClO
Molecular weight:	120.5
CAS number	638-29-9
EU number	2113301

Other name

Valeryl chloride

Aspect

Colorless liquid with a pungent odor.

Physical properties

Density d₄20: 1,01

Melting point: -110 °C

Boiling point: 126 °C/100 kPa

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

Chemical properties

- reacts by hidrolisis, yielding hydrochloric acid and valeroic acid
- reacts with amines yielding amides
- reacts with alcohols yielding esters
- reacts with mercaptanes yielding esters.

Uses

- Intermediate for organic synthesis (specially for pharmaceuticals)

VALEROYL CHLORIDE, EXTRA — Framochem

Specifications

Parameter	Guaranteed Value	Method	Operating Procedure
Aspect	Clear liquid	Visual	
Color	≤ 50 apha	Colorimetry	C - 210
Assay	≥ 99.0 %	Gas chromatography	GC- 544
Phosgene	≤ 0.1 %	Iodometry	I - 230
Acidity (HCl)	≤ 0.1 %	Acidimetry	A -220
2,2-dimethyl propionyl chloride	≤ 0.1 %	Gas chromatography	GC- 544
Butyroyl chloride	≤ 0.1 %	Gas chromatography	GC- 544
2-methyl butyroyl chloride	≤ 0.5 %	Gas chromatography	GC- 544
3-methyl butyroyl chloride	≤ 0.25 %	Gas chromatography	GC- 544
Impurity	≤ 0.25 %	Gas chromatography	GC- 544
Total impurities	≤ 1 %	Gas chromatography	GC- 544
Iron	≤ 10 ppm	Colorimetry	C - 810

Packaging

- Polyethylene drum with flourine coating containing 190 kg

Handling precautions

- Physico-chemical hazard

Flash point (tag closed cup): 23 °C
Flammable.

- Health hazards

LD 50 (ingestion rat): 650 mg/kg = harmful
Corrosive: causes burns
Irritating on skin, mucuous membranes and eyes.

- Recommendations

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.

Neutralize by reaction with basic 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 (color, anhydride, hydroclorid and valeroic acid level).

TRANSPORT

refer to MSDS

Nr 1630C —November, 2014