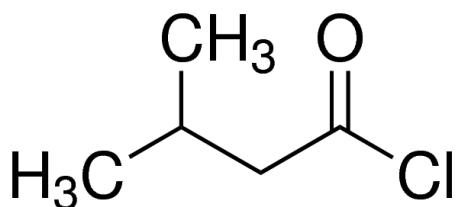


DATA SHEET Nr 1631 A PROJECT

ISOVALERYL CHLORIDE
IVACL



Molecular formula:	C ₅ H ₉ ClO
Molecular weight:	120.6
CAS number:	108-12-3
EC number:	203-552-2

SYNONYMS

3-Methyl butyryl chloride

APPEARANCE

Clear liquid with pungent odor.

PHYSICAL PROPERTIES

Density (20 °C): 0,989 g/cm³

Boiling point: 117 °C/101 kPa

Solubility:

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

CHEMICAL PROPERTIES

- Reacts by hydrolysis yielding hydrochloric acid and isovaleric acid.
- Reacts with amines yielding amides.
- Reacts with alcohols yielding esters.
- Reacts with mercaptanes yielding thioesters.

USES

- Intermediate for organic synthesis.

ISOVALERYL CHLORIDE

IVACL

SPECIFICATION

Parameter	Guaranteed value	Method	Operating procedure
Appearance	Clear liquid	Visual	
Color	≤ 50 APHA	Colorimetry	C – 210
Purity	≥ 98 %	Gas chromatography	GC – 544
Phosgene	≤ 0.1 %	Iodometry	I – 230
Acidity (HCl)	≤ 0.1 %	Acidimetry	A – 220

PACKAGING

- Polyethylene drum containing 190 kg or PE lined metal drum 180 kg.

HANDLING PRECAUTIONS

- Physicochemical hazard:
Flash point (closed cup): 27 °C
Flammable.
- Health hazards:
LD 50 (oral, rat): no data
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, valeric acid and anhydride levels).

TRANSPORTATION

Refer to MSDS.

Nr 1631 A January 2022

