

Data Sheet Nr 2850 D

n-PENTYL CHLOROFORMATE PENCF

CH₃-(CH₂)₄-O-CO-Cl

Molecular formula: $C_6H_{11}ClO_2$

Molecular weight: 150,6

CAS number: 638-41-5

EC number: 211-336-4

SYNONYMS

Carbonic acid n-pentyl ester n-pentyl-chlorocarbonate

APPEARANCE

Colorless liquid with characteristic odor.

PHYSICAL PROPERTIES

Density: $1,03 \text{ g/cm}^3$

Boiling point 60-62 °C/15 mbar

Solubility:

- Soluble in usual organic solvents (acetone, chloroform, toluene, THF).
- Not soluble in water.

CHEMICAL PROPERTIES

- Reacts by hydrolysis, yielding HCl, carbon dioxide and n-pentanol.
- Reacts with alcohols, yielding carbonates.
- Reacts with amines yielding carbamates.

USES

• Organic synthesis intermedier.



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SPECIFICATION

Parameter	Guaranteed value	Method	Operating procedure
Appearance	Clear liquid		
Colour	≤ 50 APHA	Colorimetry	C-210
Purity	≥ 98,5 %	Gas chromatography	GC-247
3-Methylbutyl chloroformate	≤ 0,1 %	Gas chromatography	GC-247
2-Methylbutyl and 3-Methylbutyl chloroformate	≤ 0,3 %	Gas chromatography	GC-247
Dipentyl carbonate	≤ 0,7%	Gas chromatography	GC-247
Other organic impurity (each)	≤ 0,5%	Gas chromatography	GC-247

PACKAGING

Metal drums with polyethylene liner containing 200 kg.

In bulk.

HANDLING PRECAUTIONS

- Physical-chemical hazard Flash point (tag closed cup): 53,5 °C
- Health hazards
 LD 50 (ingestion rat): 980 mg/kg = toxic.
- Irritating action on skin and mucous membranes.

Corrosive.

Recommended

Avoid contact with metallic compounds which catalyse the decomposition.

When handling this product, wear gloves, goggles, mask and protective clothes.

If eyes are contaminated, wash immediately with clean water for at least 15 minutes. In case of inhalation of concentrated vapours,

take person to fresh air. In both cases, consult a physician.

• Neutralization Neutralize by reaction with a basic solution.

STORAGE

Stored in it is 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 it is qualitative evolution such as the colour, the hydrochloric acid and alcohol levels.

TRANSPORT

Refer to MSDS

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