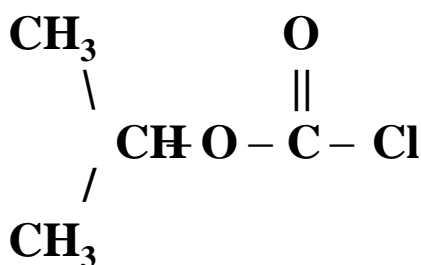


DATA SHEET Nr 2140 G

ISOPROPYL CHLOROFORMATE

IPCF



Molecular formula:	C ₄ H ₇ ClO ₂
Molecular weight:	122.5
CAS number:	108-23-6
EC number:	203-563-2

SYNONYM

Carbonochloridic acid, 1-methylethyl ester.

APPEARANCE

Clear liquid with pungent odor.

PHYSICAL PROPERTIES

Density (20 °C): 1.08 g/cm³

Boiling point: starts to decompose at 50 °C

Solubility:

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

CHEMICAL PROPERTIES

- Reacts by hydrolysis yielding hydrochloric acid, carbon dioxide and isopropanol.
- Reacts with alcohols yielding carbonates.
- Reacts with amines yielding carbamates.

USES

- Organic synthesis intermediate.
- Synthesis intermediate for polymerization initiators.

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SPECIFICATION

Parameter	Guaranteed value	Method	Operating procedure
Appearance	Clear liquid	Visual	
Color	≤ 10 APHA	Colorimetry	C – 210
Purity	≥ 99.0 %	Gas chromatography	GC – 242
Phosgene	≤ 0.1 %	Iodometry	I – 230
Hydrogen chloride	≤ 0.02 %	Acidimetry	A – 220
Isopropanol	≤ 0.3 %	Gas chromatography	GC – 242
Di-isopropyl carbonate	≤ 0.3 %	Gas chromatography	GC – 242
Iron	≤ 1 ppm	Atomic absorption spectrometry	AAS – 810
Isopropyl chloride	≤ 0.5 %	Gas chromatography	GC – 242

PACKAGING

Polyethylene lined metal drum containing 200 kg.

HANDLING PRECAUTIONS

- Physicochemical hazard:
Flash point (closed cup): 16 °C
- Health hazards:
LD 50 (oral, rat): 545 mg/kg
Irritating action to the eyes, skin and mucous membranes.
Corrosive.
- Recommended:
Avoid contact with metallic compounds (especially iron salts) which catalyze its 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 vapors take person to fresh air. In both cases consult a physician.

- Neutralization:

Neutralize by reaction with an alkaline solution.

STORAGE

Keep in its original, closed and labelled container. The place of storage has to be properly ventilated and cleanable.

Store in dry place, storage temperature must be: < 0°C

In contact with metallic compounds it decomposes yielding hydrogen chloride and carbon dioxide and the inner pressure of the drum increases, therefore it has to be opened with care.

In case of prolonged storage it is recommended to check again the product before use by measuring typical parameters of its quality such as color, hydrogen chloride and isopropanol levels.

TRANSPORTATION

Refrigerated transport.

Refer to MSDS.