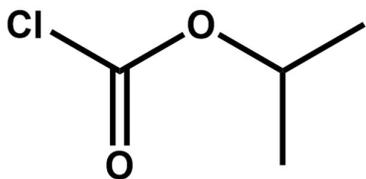


DATA SHEET Nr 2140 G  
**ISOPROPYL CHLOROFORMATE**  
**IPCF**



Molecular formula: C<sub>4</sub>H<sub>7</sub>ClO<sub>2</sub>

Molecular weight: 122.5

CAS number: 108-23-6

EC number: 203-593-2

**SYNONYMS**

Carbonochloridic acid, 1-methylethyl ester  
1-Methylethyl chloroformate  
2-Propyl chloroformate  
Isopropyl chlorocarbonate

**APPEARANCE**

Clear liquid with pungent odor.

**PHYSICAL PROPERTIES**

Density (20 °C): 1.08 g/cm<sup>3</sup>

Decomp: 50 °C

Solubility:

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

**CHEMICAL PROPERTIES**

- Reacts by hydrolysis to yield hydrochloric acid isopropanol and carbon dioxide
- Reacts with amines to yield isopropyl carbamates.
- Reacts with to yield isopropyl carbonates.

**USES**

- Used as a building block to deliver isopropyl carbamate or carbonate moieties in a range of pharmacological syntheses

## ISOPROPYL CHLOROFORMATE IPCF

### 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

Corrosive; irritating to skin, mucous membranes and eyes

- Recommended:

Avoid contact with metallic compounds, especially iron, as these catalyze decomposition.

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 cold alkaline solutions.

### STORAGE

The product is stable if stored in its closed original drum in a covered, dry, cool and well-ventilated area. **Recommended storage temp: < 0 °C**

However, in case of prolonged storage it is recommended to re-analyze for isopropanol and HCl.

### TRANSPORTATION

Refrigerated transport required

Refer to MSDS

Nr 2140 G

August 2018



503/0113(7)-465(7)