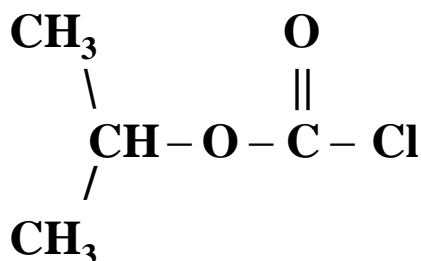


DATA SHEET Nr 2140 F

ISOPROPYL CHLOROFORMATE



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.

Aspect

Colorless liquid, lachrymator with a pungent odor.

Physical properties

Density d₄20: 1.07

Boiling point: 105 °C

Solubility:

- Soluble in usual organic solvents (acetone, chloroform, toluene, 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.

ISOPROPYL CHLOROFORMATE

SPECIFICATION

Parameter	Guaranteed Value	Method	Operating Procedure
Aspect	Clear liquid		
Color	≤ 10 APHA	Colorimetric	C-210
Isopropyl chloroformate	≥ 99 %	Gas chromatography	GC-240
Phosgene	≤ 0.1 %	Iodometry	I-230
Hydrogen chloride	≤ 0.02 %	Acidimetric	A-220
Isopropyl alcohol	≤ 0.3 %	Gas chromatography	GC-240
Di isopropyl carbonate	≤ 0.3 %	Gas chromatography	GC-240
Iron	≤ 1 ppm	Atomic absorption	AAS-810
Isopropyl chloride	≤ 0.5 %	Gas chromatography	GC-240

Packaging

Metal drums with polyethylene liner containing 200 kg.

Handling precautions

- Physical-chemical hazard
Flash point (tag closed cup): 16 °C
- Health hazards
LD 50 (ingestion rat): 1070 mg/kg = harmful.
Irritating action on eyes, skin and mucous membranes.
Corrosive.
- Recommended
Avoid contact with metallic compounds (especially iron salts) which catalyze 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 vapor, take person to fresh air. In both cases, consult a physician.

- Neutralization
Neutralize by reaction with basic solution.

Storage

Technical measures and storage condition:
Keep in original, closed and labelled container.
The place of storage has to be properly ventilated and cleanable.

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

Transport

Refer to MSDS.

Nr 2140 F — June, 2016