

DATA SHEET Nr 2110 F

2-ETHYLHEXYL CHLOROFORMATE 2EHCF

$$C_{2}H_{5} \qquad O \\ \uparrow \\ CH - CH_{2} - O - C \\ \uparrow \\ C_{4}H_{9} \qquad CI$$

Molecular formula:	$C_9H_{17}ClO_2$	
Molecular weight:	192.7	
CAS number:	24468-13-1	
EC number:	246-278-9	

SYNONYMS

Carbonochloridic acid, 2-ethylhexyl ester; 2-ethylhexyl chlorocarbonate.

APPEARANCE

Clear liquid with pungent odor.

PHYSICAL PROPERTIES

Density (20 °C): 0.98 g/cm^3

Boiling point: starts to decompose at 100 °C

Melting point:

Solubility:

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

CHEMICAL PROPERTIES

- Reacts by hydrolysis yielding hydrochloric acid, carbon dioxide and 2-ethylhexanol.
- Reacts with alcohols yielding carbonates.
- Reacts with amines yielding carbamates.

USES

< - 55 °C

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

FramoChem A Van De Mark – Company

2-ETHYLHEXYL CHLOROFORMATE

2EHCF

SPECIFICATION

Parameter	Guaranteed value	Method	Operating procedure
Appearance	Clear liquid	Visual	
Color	\leq 20 APHA	Colorimetry	C – 210
Purity	≥99.3 %	Gas chromatography	GC - 270
Phosgene	≤ 0.01 %	Iodometry	I-230
Hydrogen chloride	≤ 0.02 %	Acidimetry	A – 220
Iron	\leq 0.5 ppm	Atomic absorption spectrometry	AAS - 810
2-Ethylhexanol	≤ 0.1 %	Gas chromatography	GC – 270
Di-(2-ethylhexyl) carbonate	≤ 0.3 %	Gas chromatography	GC – 270
Carbon tetrachloride	≤ 0.01 %	Gas chromatography	GC – 270

PACKAGING

Polyethylene lined metal drum containing 180 kg. Polyethylene drum containing 200 kg. In bulk.

HANDLING PRECAUTIONS

- <u>Physicochemical hazard:</u> Flash point (closed cup): 86 °C
- <u>Health hazards:</u> LD 50 (oral, rat): 5420 mg/kg Slightly irritating on skin, mucous membrane and eyes. Corrosive.
- <u>Recommended:</u> Avoid contact with metallic compounds which catalyze its decomposition.

Wear gloves, goggles, mask and protective clothes.

If eyes are contaminated wash immediately with clean water for at least 15 minutes and

Nr 2110 F August 2018



consult a physician. If concentrated vapors are inhaled carry person into fresh air and call a physician.

• <u>Neutralization:</u> Neutralize by reaction with an alkaline solution.

STORAGE

Stored in its closed original drum, protected from direct sunshine, in a covered, cool, dry and wellventilated 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 such as color, 2-ethylhexanol and hydrogen chloride levels.

TRANSPORTATION

Refer to MSDS.

