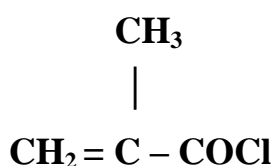


Data Sheet Nr 1910 F

# METHACRYLOYL CHLORIDE

## MACL

### STABILIZED



Molecular formula:	C <sub>4</sub> H <sub>5</sub> ClO
Molecular weight:	104.5
CAS number:	920-46-7
EC number:	213-058-9

#### SYNONYM

2-Methyl-2-propenoyl chloride

#### APPEARANCE

Clear, slightly colored liquid with pungent odor.

#### PHYSICAL PROPERTIES

Density (20 °C): 1.07 g/cm<sup>3</sup>

Boiling point: 95-97 °C/101 kPa

Solubility:

Soluble in chlorinated solvents and aromatic hydrocarbons.

#### CHEMICAL PROPERTIES

- Reacts by hydrolysis yielding hydrochloric acid and methacrylic acid.
- Reacts with amines yielding amides.
- Reacts with alcohols yielding esters.
- Reacts with mercaptanes yielding thioesters.
- Ready to polymerize without stabilization and in case of prolonged storage. This polymerization is an exothermic reaction.

#### USES

- Intermediate for chemical synthesis.

## METHACRYLOYL CHLORIDE MACL STABILIZED

### SPECIFICATION

Parameter	Guaranteed value	Method	Operating procedure
Appearance	Clear liquid	Visual	
Purity	≥ 97.0 %	Gas chromatography	GC – 432
Phosgene	≤ 0.2 %	Iodometry	I – 230
Acidity (HCl)	≤ 0.2 %	Acidimetry	A – 220
Methacrylic acid	≤ 1.0 %	Gas chromatography	GC – 432
Methacrylic anhydride	≤ 1.0 %	Gas chromatography	GC – 432
Standard stabilizer: 200 ppm Phenotiazine			

### PACKAGING

- Polyethylene lined metal drum containing 25 or 50 kg.
- In bulk for internal use.

### HANDLING PRECAUTIONS

- Physicochemical hazard:  
Flash point (closed cup): 2 °C  
Flammable.
- Health hazards:  
LD 50 (oral, rat): 1320 mg/kg  
Corrosive: causes burns  
Irritating on skin, mucous membranes and eyes.
- Recommendations:  
Avoid the contact with alkalines, water, amines and alcohols. Wear gloves, glasses, mask and protective clothes.  
If eyes are contaminated wash immediately with clean water for at least 15 minutes.  
If concentrated vapors are inhaled carry the person into fresh air out of the contaminated area.  
In both cases call a physician.
- Neutralization:  
Neutralize by reaction with an alkaline solution.

### STORAGE

The product must be stored in its closed original packaging under refrigeration **below 0 °C**.

**Maximum storage time: 3 months.**

### TRANSPORTATION

Refrigerating is needed.  
Refer to MSDS.

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