

## PRODUCT IN FOCUS



# Chloromethyl chloroformate

### INTRODUCTION

Chloromethyl chloroformate is a colorless liquid, which was earlier employed in its gaseous form as warfare chemical under the name Palite gas. In chemicals industry, for its extreme reactivity, it is used to make pharmaceuticals and intermediates.

### Manufacture

The chloroformic acid ester is produced by allylic chlorination of methyl chloroformate, which in turn is formed by reaction of methanol with phosgene.

### Applications in Pharmaceuticals

The ester is a KRM for the manufacture of APIs:

- ⓧ Ronidazole, an antibiotic
- ⓧ Tenofovir, an anti-HIV drug
- ⓧ Aminocarbonyloxymethyl ester of Diclofenac and Flufenamic Acid
- ⓧ Monomethoxypoly(ethylene glycol) prodrug of Cyclosporine A

### Applications in Intermediates

Chloromethyl chloroformate forms a variety of intermediates such as:

- ⓧ Chloromethyl chlorosulphate
- ⓧ Methyl chlorosulphonate
- ⓧ Chloromethyl ethyl carbonate
- ⓧ Chloromethyl isopropyl carbonate
- ⓧ Carbamates

#### Synonyms

Chloromethoxycarbonyl chloride  
Chloromethyl carbonochloridate

#### CAS no.

22128-62-7

#### EINECS no.

244-793-3

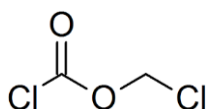
#### Molecular formula

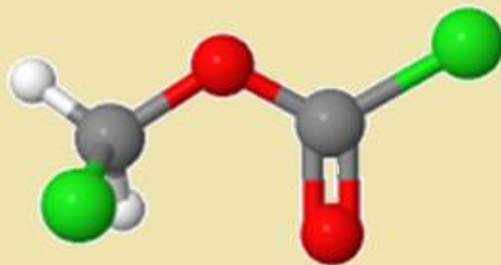
$C_2H_2Cl_2O_2$

#### Molecular weight

128.94

#### Structure





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### SPECIFICATIONS

Test	Unit	Specification
Appearance	-	Clear colorless to yellow liquid
Solubility	-	Should be soluble in dichloromethane
Identification by FTIR	-	Should conform to the structure
Chromatographic purity by GC	%	Min 98.0
Dichloromethyl chloroformate by NMR	%	Max 1.0

### STORAGE

Recommended storage temperature is 2° to 8°C.

### PACKING

25 kg UN approved drum

ExSyn offers chloromethyl chloroformate on commercial scales and welcomes enquiries. No matter the quantity you need, our exceptional quality and service will make ExSyn your supplier of choice! If you need any additional information or SDS, please get in touch with us.