

### DATA SHEET Nr 3500 D

# 1-CHLOROETHYL ISOPROPYL CARBONATE 1CEIC

Molecular formula:  $C_6H_{11}ClO_3$ 

Molecular weight: 166.6

CAS number: 98298-66-9

EC number: 424-590-8

### **SYNONYM**

α-Chloroethyl isopropyl carbonate Carbonic acid 1-chloroethyl isopropyl ester 1-chloroethyl 1-methylethyl carbonate

### **APPEARANCE:**

Clear liquid.

### PHYSICAL PROPERTIES

Density (20 °C): 1.085 g/cm<sup>3</sup>

Boiling point: 164.3 °C

Melting point: −80 °C

Solubility:

Soluble in the main common organic solvents

(toluene, acetone, THF).

Not soluble in water.

### REACTIVITY

• Slowly hydrolyzes into its constitutive alcohols and carbonic acid.

### **USES**

• Frequently employed building block in pharmaceutical research.



## 1-CHLOROETHYL ISOPROPYL CARBONATE (1CEIC)

### **SPECIFICATIONS**

| Parameter                     | Guaranteed<br>value | Method             | Operating procedure |
|-------------------------------|---------------------|--------------------|---------------------|
| Appearance                    | clear liquid        |                    |                     |
| Color                         | ≤ 100 APHA          | Colorimetry        | C – 210             |
| Purity                        | ≥ 98.5 %            | Gas chromatography | GC – 388            |
| Isopropyl alcohol             | ≤ 0.5 %             | Gas chromatography | GC – 388            |
| 1-Chloroethyl ethyl carbonate | ≤ 0.1 %             | Gas chromatography | GC – 388            |
| Di-isopropyl carbonate        | ≤ 1.0 %             | Gas chromatography | GC - 388            |
| Isopropyl vinyl carbonate     | ≤ 0.5 %             | Gas chromatography | GC – 388            |
| Largest unidentified impurity | ≤ 0.2 %             | Gas chromatography | GC – 388            |
| Water                         | ≤ 0.10%             | Karl-Fischer       | K – 110             |

### **PACKAGING**

Polyethylene lined metal drums containing 180kg.

### HANDLING PRECAUTIONS

• Physicochemical hazard:

Flash point: 55.1°C

Health hazard:

LD 50 (rat, oral): >2000mg/kg. Sensitization by skin contact. Irritant.

 When handling use approved safety eyewear, chemically resistant gloves and protective laboratory clothing If contact with skin occurs, rinse with soap and water. For contact with eyes flush gently with clean water and consult a physician.

• Destruction: Incineration.

#### **STORAGE**

The product is stable if stored in its closed, original drum in a covered, dry, cool and well-ventilated area.

However, in case of prolonged storage it is recommended to check again the product before use by measuring typical quality parameters.

### **TRANSPORT**

Refer to MSDS.

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