DATA SHEET Nr 3600 J

1-CHLOROETHYL CYCLOHEXYL CARBONATE
1CECC

Molecular formula: \( \text{C}_9\text{H}_{15}\text{ClO}_3 \)
Molecular weight: 206,7
CAS number: 99464-83-2
EC number: 444-950-8

SYNONYM
α-Chloroethyl cyclohexyl carbonate

APPEARANCE
Clear liquid with pungent odor

PHYSICAL PROPERTIES
Density: 1,12 g/cm\(^3\)
Melting point: -16 °C
Solubility:
Soluble in common organic solvents (toluene, acetone, chloroform, THF).

CHEMICAL PROPERTIES
- Reacts on its active chlorine.

USES
- Synthesis intermediate for pharmaceuticals
1-CHLOROETHYL CYCLOHEXYL CARBONATE (1CECC)

SPECIFICATION

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Guaranteed value</th>
<th>Method</th>
<th>Operating procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear liquid</td>
<td>Visual control</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>from colorless to yellowish</td>
<td>Visual control</td>
<td></td>
</tr>
<tr>
<td>HCl</td>
<td>≤ 0,01 %</td>
<td>Acidimetry</td>
<td>A-220</td>
</tr>
<tr>
<td>Purity</td>
<td>≥ 98,0 %</td>
<td>Gas chromatography</td>
<td>GC-390</td>
</tr>
<tr>
<td>Dicyclohexyl carbonate</td>
<td>≤ 0,2 %</td>
<td>Gas chromatography</td>
<td>GC-390</td>
</tr>
<tr>
<td>Cyclohexanol</td>
<td>≤ 1,0 %</td>
<td>Gas chromatography</td>
<td>GC-390</td>
</tr>
<tr>
<td>I1 impurity</td>
<td>≤ 0,05 %</td>
<td>Gas chromatography</td>
<td>GC-390</td>
</tr>
<tr>
<td>I2 impurity</td>
<td>≤ 0,05 %</td>
<td>Gas chromatography</td>
<td>GC-390</td>
</tr>
<tr>
<td>I3 impurity</td>
<td>≤ 0,2 %</td>
<td>Gas chromatography</td>
<td>GC-390</td>
</tr>
<tr>
<td>Unspecified impurity, each</td>
<td>≤ 0,2 %</td>
<td>Gas chromatography</td>
<td>GC-390</td>
</tr>
<tr>
<td>Water</td>
<td>≤ 0,05 %</td>
<td>Karl-Fischer</td>
<td>K-110</td>
</tr>
</tbody>
</table>

PACKAGING

PE drum containing 220 kg.
PE-lined metal drum containing 200 kg.

HANDLING PRECAUTIONS

Refer the MSDS.

- **Physical chemical hazard:** Flashpoint (tag close cup): 100 °C

- **Health hazards:**
  
  LD 50 (rat, oral): 5600 mg/kg. 
  
  Irritating on skin, mucous membranes and eyes.

- **Recommended:**
  
  Wear glasses, gloves and protective clothes
  
  Destruction by incineration.

STORAGE

Stored in its closed original drum in a covered, dry and well-ventilated warehouse below than 15°C the product is stable.

Harmful.

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

TRANSPORT

Refer to MSDS.

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