DATA SHEET Nr 2500 F

DIETHYLENE GLYCOL BISCHLOROFORMATE
DEGCF

Molecular formula: C₆H₆O₅Cl₂
Molecular weight: 231.0
CAS number: 106-75-2
EC number: 203-430-9

SYNONYM
Oxydiethylene bischloroformate.

APPEARANCE
Clear liquid with pungent odour.

PHYSICAL PROPERTIES
Density (20 °C): 1.39 g/cm³
Melting point: 6 – 7 °C
Solubility:
Soluble in the main common organic solvents (acetone, toluene, methylene chloride, THF, dioxane, dichloroethane, chlorobenzene, ethyl acetate).

CHEMICAL PROPERTIES
- Reacts by hydrolysis yielding hydrochloric acid, carbon dioxide and diethylene glycol.
- Reacts with alcohols yielding carbonates.
- Reacts with amines yielding carbamates.

USES
- Organic synthesis intermediate.
**DIETHYLENE GLYCOL BISCHLOROFORMATE**  
**DEGCF**

**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</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>≤ 50 APHA</td>
<td>Colorimetry</td>
<td>C – 210</td>
</tr>
<tr>
<td>Purity</td>
<td>≥ 98.0 %</td>
<td>Gas chromatography</td>
<td>GC – 244</td>
</tr>
<tr>
<td>Phosgene</td>
<td>≤ 0.1 %</td>
<td>Iodometry</td>
<td>I – 230</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>≤ 0.1 %</td>
<td>Acidimetry</td>
<td>A – 220</td>
</tr>
<tr>
<td>Monochlorhydrin</td>
<td>≤ 0.1 %</td>
<td>Gas chromatography</td>
<td>GC – 244</td>
</tr>
<tr>
<td>Dimer</td>
<td>≤ 1.5 %</td>
<td>Gas chromatography</td>
<td>GC – 244</td>
</tr>
</tbody>
</table>

**PACKAGING**

Polyethylene lined metal drum containing 25 or 250 kg.

Polyethylene drum containing 250 kg.

**HANDLING PRECAUTIONS**

- **Physicochemical hazard:**
  - Flash point (closed cup): 182 °C

- **Health hazards:**
  - LD 50 (oral, rat): 1650 mg/kg

  Irritating action on skin, eyes and mucous membranes.
  Corrosive.

- **Recommended:**
  - When handling this product wear mask, gloves, goggles and protective clothes.
  - Wash contaminated surfaces immediately with plenty of water.

  If eyes are contaminated wash immediately with clean water for at least 15 minutes.
  In case of inhalation take person to fresh air.
  Call a physician.

  - **Neutralization**
    Neutralize with an alkaline solution.

**STORAGE**

Stored in its closed original drum, protected from direct sunshine, in a covered, dry, cool and well-ventilated 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, purity and hydrogen chloride levels.

**TRANSPORTATION**

Refer to MSDS.