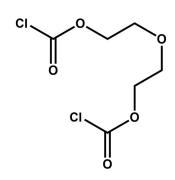


DATA SHEET Nr 2500 F

DIETHYLENE GLYCOL BISCHLOROFORMATE



DEGCF

Molecular formula: $C_6H_8O_5Cl_2$ Molecular weight: 231.0

CAS number: 106-75-2EC number: 203-430-9

SYNONYM

Oxydiethylene bischloroformate.

Bis(2-chlorocarbonyloxyethyl)ether

1,5-Bis[(chlorocarbonyl)oxy]-3-oxapentane

APPEARANCE

Clear liquid with pungent odour.

PHYSICAL PROPERTIES

Density (20 °C): 1.35 g/cm^3 Melting point: 6-7 °C

Boiling point: 127 °C (5 torr)

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 diethylene glycol carbonates.
- Reacts with amines yielding diethylene glycol carbamates.

USES

- Organic synthesis intermediate.
- Base reagent for the formation of polycarbonates
- Used in the syntheses of biodegradable polymers
- Component in a range of polyurethane materials



DIETHYLENE GLYCOL BISCHLOROFORMATE DEGCF

SPECIFICATION

Parameter	Guaranteed value	Method	Operating procedure
Appearance	Clear liquid	Visual	
Color	≤ 50 APHA	Colorimetry	C-210
Purity	≥ 98.0 %	Gas chromatography	GC – 244
Phosgene	≤ 0.1 %	Iodometry	I – 230
Hydrogen chloride	≤ 0.1 %	Acidimetry	A – 220
Monochlorhydrin	≤ 0.1 %	Gas chromatography	GC – 244
Dimer	≤ 1.5 %	Gas chromatography	GC – 244

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

• <u>Health hazards</u>:

LD 50 (oral, rat): 1650 mg/kg LD50 (dermal, mouse): 2000 mg/kg

Irritating action on skin, eyes and mucous membranes.

Corrosive.

• Recommended:

When handling this product wear chemical resistant gloves, approved safety eyewear and laboratory-appropriate chemical resistant clothing

In case of eye contact, rinse with clear water for a minimum of 15 minutes and see medical attention immediately

In case of acute inhalation, remove the contaminated person to fresh air and contact a physiciam

Neutralization

Neutralize with an alkaline solution.

STORAGE

The product is stable when stored in an original drum, protected from direct sunshine, in a covered, dry, cool and well- ventilated area.

In case of prolonged storage, the product should be re-analyzed before use, monitoring color, purity and hydrogen chloride levels.

TRANSPORTATION

Refer to MSDS.



