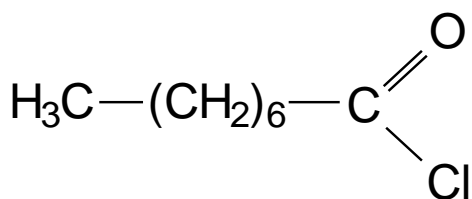


DATA SHEET Nr 1100 F

# OCTANOYL CHLORIDE

## NOCL



|                    |                                    |
|--------------------|------------------------------------|
| Molecular formula: | C <sub>8</sub> H <sub>15</sub> ClO |
| Molecular weight:  | 162.5                              |
| CAS number:        | 111-64-8                           |
| EC number:         | 203-891-6                          |

### SYNONYM

n - Octanoyl chloride

### APPEARANCE

Clear liquid with pungent odor.

### PHYSICAL PROPERTIES

Density (20 °C): 0.95 g/cm<sup>3</sup>

Melting point: -63 °C

Boiling point: 196 °C/101 kPa

Solubility:

Soluble in usual organic solvents (acetone, chloroform, toluene, THF).

### CHEMICAL PROPERTIES

- Reacts by hydrolysis yielding hydrochloric acid and octanoic acid.
- Reacts with amines yielding amides.
- Reacts with alcohols yielding esters.

### USES

- Intermediate for organic synthesis.

## OCTANOYL CHLORIDE NOCL

### SPECIFICATION

| Parameter                 | Guaranteed value | Method             | Operating procedure |
|---------------------------|------------------|--------------------|---------------------|
| Appearance                | Clear liquid     | Visual             |                     |
| Color                     | ≤ 50 APHA        | Colorimetry        | C – 210             |
| Purity                    | ≥ 99.0 %         | Gas chromatography | GC – 422            |
| C <sub>6</sub> chlorides  | ≤ 0.5 %          | Gas chromatography | GC – 422            |
| C <sub>10</sub> chlorides | ≤ 0.5 %          | Gas chromatography | GC – 422            |
| Phosgene                  | ≤ 0.1 %          | Iodometry          | I – 230             |
| Acidity (HCl)             | ≤ 0.1 %          | Acidimetry         | A – 220             |
| Octanoic acid             | ≤ 0.1 %          | Gas chromatography | GC – 422            |
| Other chlorides (each)    | ≤ 0.1 %          | Gas chromatography | GC – 422            |
| Octanoic anhydride        | ≤ 1.0 %          | Gas chromatography | GC – 422            |

### PACKAGING

Polyethylene lined metal drum containing 180 kg.  
Polyethylene drum containing 195 kg.  
In bulk.

### HANDLING PRECAUTIONS

- Physicochemical hazard:  
Flash point (closed cup): 82 °C
- Health hazards:  
LD 50 (oral, rat): >2000 mg/kg  
Corrosive: causes burns  
Irritating on skin, mucous membranes and eyes.
- Recommended:  
Wear gloves, glasses, mask and protective clothes.  
If eyes are contaminated wash immediately with clean water for at least 15 minutes.  
If concentrated vapors are inhaled carry the person into fresh air out of the contaminated area.  
In both cases call a physician.
- Neutralization:  
Neutralize by reaction with an alkaline solution.

### STORAGE

Stored in its closed original drum 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 quality parameters (color, hydrogen chloride, octanoic acid and anhydride levels).

### TRANSPORTATION

Refer to MSDS.

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