

Data Sheet Nr 1850 N

ACRYLOYL CHLORIDE ACCL

STABILIZED

$$H_2C = CH - C$$

Molecular formula: C_3H_3ClO

Molecular weight: 90.5

CAS number: 814-68-6

EC number: 212-399-0

SYNONYM

2-Propenoyl chloride

APPEARANCE

Clear liquid with pungent odor.

PHYSICAL PROPERTIES

Density (20°C): 1.12 g/cm^3 Boiling point: 75 °CMelting point: -72 °C

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

CHEMICAL PROPERTIES

- Reacts by hidrolysis yielding hydrochloric acid and acrylic acid.
- Reacts with amines yielding amides.
- Reacts with alcohols yielding esters.
- Reacts with mercaptanes yielding thioesters.
- Ready to polymerize in an uncontrolled exotermic reaction if not stabilized.

USES

- Intermediate for pharmaceutical and fine chemical synthesis.
- Monomer for polymerization.



ACRYLOYL CHLORIDE ACCL STABILIZED

SPECIFICATION

Parameter	Guaranteed value	Method	Operating procedure
Appearance	Clear liquid	Visual	
Purity	≥ 97.0 %	Gas chromatography	GC – 430
Phosgene	≤ 0.2 %	Iodometry	I – 230
Acidity (HCl)	≤ 0.2 %	Acidimetry	A – 220
Acrylic acid	≤ 1.0 %	Gas chromatography	GC - 430
Acrylic anhydride	≤ 1.0 %	Gas chromatography	GC - 430

Standard stabilizer: 200 ppm phenothiazine.

On customers request: other amount of phenothiazine or 23-29 ppm chloropromazine.

PACKAGING

• Polyethylene lined metal drum containing 25 kg or 50 kg.

HANDLING PRECAUTIONS

• Physicochemical hazard:

Flash point (closed cup): -4 °C Flammable.

Health hazard:

LD 50 (oral, rat): 500 mg/kg

Corrosive: causes burns

Irritating on skin, mucous membranes and eyes.

• Recommendation:

Avoid its heating.

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

The product must be stored in its original closed drum under refrigeration **below 0** °C.

However, in case of prolonged storage it is recommended to check again the product before use by measuring its purity and oligomer content.

TRANSPORTATION

Composite packaging, under refrigeration.

Refer to MSDS.

Nr 1850 N May 2021



