

L-61049 ε-caprolactone

CAS#: 502-44-3

Description

L-61049 is a colorless oily liquid with a special aroma of ester. Its molecule contains a five-membered lactone ring and an alkyl side chain. Since the carbonyl and epoxy groups on the lactone ring fix the structure of the molecule, the ε-caprolactone molecule exhibits strong stability and inertness. At the same time, the presence of alkyl side chains makes ε-caprolactone have better solubility and compatibility in solvents. Since the molecule of 6-caprolactone contains a carbonyl group, it has certain reactivity and can undergo various chemical reactions such as esterification, addition, and nucleophilic substitution.

Technical data

Appearance	Transparent liquid
Molecular weight (g/mol)	114.14
Acid value (mg KOH/g)	0.3 max
Color number (APHA)	≤100
Viscosity (25°C, CPS)	15-25
Density	1.03g/mL at 25°C(lit.)
Boiling point	96-97.5°C 10 mm Hg(lit.)
Flash point	229°F
Water solubility	>1000 MG/L (20°C)
Refractive index	n20/D 1.463(lit.)
Storage conditions	Store below +30°C

Performance

Improve gloss and weather resistance
Impact resistance
Improve flexibility
High reactivity and good adhesion

Applications

It is widely used in the production of polyurethane, acrylic, polyester, epoxy resin and other synthetic rubbers, synthetic fibers and synthetic resins; it is also used in the manufacture of caprolactam, adipic acid, adhesives, coatings, epoxy resin diluents, etc. It is the main raw material for the production of polycaprolactone degradable plastics. Due to its excellent biodegradation and biocompatibility, polycaprolactone degradable plastic has broad market prospects in the fields of biodegradable materials, medical devices, drug carriers and 3D printing.

Storage

To prevent the product from polymerization and gelling, please keep it sealed and away from heat and light. Recommended storage temperature is not higher than 30°C. Unused products must be sealed and stored in a timely manner and cannot be stored in the open. Safe storage time is 6 months at room temperature(25°C) and under ventilation. 25KG/200KG/barrel.

Tips: L-61049 has low viscosity, high reactivity, good dilution and flexibility.

Note: Technical data represents typical values only. In view of the differences in formulas, production process, conditions, all the above statements must be adjusted according to the actual situation, our company does not make any promises. Our company reserves the right to reform its products without prior notice of any changes.