L-61057 (TEGDMA) Triethylene glycol dimethacrylate

CAS#: 109-16-0 C14H22O6

Molecular weight (g/mol): 286.32

Description

L-61057 TEGDMA is a unique chemical structure and reactivity containing diacrylate, which is used in many polymer synthesis and light-curing systems:

In the field of optical materials, TEGDMA is mixed with other monomers such as GMA (bisphenol A dimethacrylate) and then polymerized by ultraviolet or visible light to form a hard and transparent solidified material, such as denture base resin, light-curing coating and optical fiber coating.

In the field of polymer chemistry, TEGDMA can be used as a component of high-performance adhesives and sealants to improve the heat resistance, impact resistance and bonding strength of the product.

Due to its good light transmittance and cross-linking properties, TEGDMA is also used in electronic packaging materials and potting glue to provide excellent electrical insulation and mechanical stability.

In light-curing 3D printing technology, TEGDMA, as part of the resin formula, can adjust the fluidity and curing speed of the resin, thereby affecting the printing accuracy and mechanical properties of the final product.

In addition, TEGDMA may also play a role in the preparation of other materials that require rapid curing, such as the production of wear-resistant coatings, anti-slip layers, decorative layers, etc.

Technical data

Appearance	Transparent liquid
Color Value (APHA)	≤60
Acid value (mg KOH/g)	≤0.5
Viscosity (25°C, CPS)	5 --15
Moisture %	≤0.2
Inhibitor (ppm)	≤300
Refractive Index	1.458
Surface tension Dynes/cm,20°C	34.8
Glass transition temperature Tg,°C	53
Functional Group	2

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Performance

Low irritation, good hardness and toughness

Good heat resistance, high chemical resistance

High cross-linking density, good hydrophobicity

Very low volatility, good dilution

Applications

UV adhesives, UV inkjet, UV ink, UV coatings, UV hydrophobic coatings, photosensitive polymers, wire and cable coatings, adhesives and sealants, excellent compatibility with unsaturated polyesters used for chemical fixing and anchor bolts etc.

Storage

To prevent the product from being highly active and causing a polymerizing reaction, please seal it and store it away from heat sources and sunlight. The recommended storage temperature is no higher than 30°C. Unused products must be sealed and stored in a timely manner. Do not store them in the open. At 25°C and with ventilation, the safe storage period is 6 months.

Tips: L-61057 is an ideal product for the formulation of dibenzoyl peroxide (BPO) curing system, with excellent active dilution ability and stability.