Trust 61330

Fluorine-modified low refractive index UV resin

INTRODUTION

Application: T-61330 resin is a difunctional fluorine-modified acrylate UV resin with a refractive index (RI) of 1.330. It features the low dielectric constant and low surface tension typical of fluororesins. It does not contain harmful substances such as heavy metals and meets environmental requirements such as RoHS and PFAS. Due to its high fluorine content, thin films require curing under anaerobic film-covered conditions or nitrogen protection; thick-film dispensing cures relatively quickly. Its moderate viscosity makes it suitable for nanoimprint or transfer processes and bonding applications.

TYPICAL VALUES

Tg(℃)	55
MW(GPC)	2800
Elongation at Break%	25
Colour, Gardner	2
Acid value,mg KOH/g	max. 2
Refractive Index	1.330
Viscosity at 25℃,mPa.s	4000
Specific Gravity	1.26
Effective content	100%

APPLICATION

UV adhesives: Due to its special high-fluorine structure, T-61330 resin offers good leveling, heat resistance, low refractive index, and low shrinkage.

UV coatings: T-61330 resin is recommended as the main resin for UV coatings, inks, and adhesives used in functional films and optical materials requiring low refractive index, such as medical, communications, optical fiber coating layers, anti-reflection coatings, and AR film materials.

INTERMISCIBILITY

Monomer: It is recommended to use LM-502 fluorine-modified acrylate monomer, which has a faster curing speed, to dissolve and dilute the resin to adjust it to construction requirements.

Polymers: The compatibility of fluororesins is generally poor, especially for high-molecular-weight and high-viscosity products. It is recommended to first mix with low-molecular-weight fluorine monomers or low-viscosity resins at low speed. After mixing evenly and confirming that there is no turbidity or precipitation, add other components.

同类型树脂搭配应用：

特性	T-61330	T-61336	T-61360	T-61370	T-61380
粘度 cps	4000	500	2500	800	9000
铅笔硬度	HB	B	3H	2H	3H
附着力	5	4	7	7	5
柔韧性	4	7	5	3	2
折光率	1.330	1.336	1.360	1.370	1.380
固化速度	3	2	6	7	8

对应比例：1 最差---10 最优