

T- 6136NS

Polyurethane-acrylate UV resin with low refractive index

INTRODUCTION

Application: T-6136NS is a low-refractive-index optical UV resin containing nano-fillers. It cures via a free-radical acrylate polymerization mechanism, offering low refractive index and high transparency, along with excellent re-adhesion and recoatability. It features rapid curing with good surface drying and exhibits high compatibility with acrylate resins and monomers.

TYPICAL VALUES

Tg(°C)	70
MW(GPC)	575
Elongation at Break%	20
Acid value,mg KOH/g	max. 1
Refractive Index	1.365
Viscosity at 25 °C ,mPa.s	1000-1500
Specific Gravity	1.15
Effective content	100%

APPLICATION

UV Coating: When applied to PET optical anti-reflection films, a single-side coating of T-6136NS resin alone can increase light transmittance by more than 3%. Combined with a high-refractive-index single-side composite coating, it can improve transmittance by about 5%. When used as a double-side composite coating, it can ideally achieve up to 98% transmittance while maintaining extremely low haze. The resin is fluorine-free, enables adhesion to multi-layer film composites, and offers broad process adaptability.

INTERMISCIBILITY

Monomer: Miscible with various acrylate UV monomers; minimize monomer usage to avoid increasing the refractive index.

Solvent: Miscible with esters, ketones, or aromatic solvents; insoluble in single alcohol solvents; soluble in mixed solvents containing alcohols and ethers.

Polymer: Highly compatible with polyester, epoxy, and polyurethane acrylate UV resins to meet formulation needs.

packing: 5kg , 20kg plastic bucket

More detailed application references and MSDS are available upon request.