

U- 6133NS

Cationically cured UV resin with low refractive index

阳离子固化低折射率 UV 树脂

INTRODUCTION

Application:

U-6133NS is a low-refractive-index optical UV resin containing nanofillers. It employs a UV cationic curing mechanism and features low refractive index, low dielectric constant, and low application viscosity. It offers relatively high surface hardness, good abrasion resistance, and broad adhesion adaptability, along with excellent re-adhesion and recoating properties. It cures rapidly with good surface drying, and can also be cured via a dual UV+thermal process to meet more stringent environmental testing requirements.

TYPICAL VALUES

Tg(°C)	75
MW(GPC)	275
Elongation at Break%	50
Acid value,mg KOH/g	max. 1
Refractive Index	1.333
Viscosity at 25℃,mPa.s	40-80
Specific Gravity	1.15
Effective content	60-65%

APPLICATION

UV Coating:

U-6133NS resin exhibits good processability, heat resistance, low refractive index, and outstanding weatherability and chemical resistance. It is used as a primary resin in UV coatings, inks, and adhesives for functional films and optical materials requiring low refractive index—for example, in specialty optical fiber coatings (telecommunications, medical), anti-reflective coatings, optical anti-reflection layers, and anti-reflection films.

INTERMISCIBILITY

Monomers:

It is compatible with various cationic UV monomers and acrylate monomers. The resin itself has low viscosity, so monomer usage should be minimized to avoid increasing the refractive index.

Solvents:

It is compatible with esters, ketones, and aromatic hydrocarbon solvents, but is insoluble in pure alcohol solvents. It dissolves in mixed solvents containing alcohols and ethers.

Polymers:

It exhibits good compatibility with UV resins in cationic curing systems, facilitating formulation customization.

packing: 5kg , 20kg plastic bucket

More detailed application references and MSDS are available upon request.