

U-9100A

Cationic Photocurable Resin

INTRODUCTION

U-9100A resin is a cationic and free radical hybrid system UV resin with the lowest viscosity and fastest curing speed. It can be fully cured under 300-400mj energy. With suitable photosensitizers and initiators, it can be used for LED long-wave light source curing, and has good results in thin film printing coatings, inks, UV inkjet printing, 3D printing and molding and other fields.

TYPICAL VALUES

Tg(°C)	65
MW(GPC)	550
Elongation at Break%	12
Colour, Gardner	1
Acid value,mg KOH/g	max. 2
Viscosity at 25°C,mPa.s	350
Specific Gravity	1.05
Effective content	100%

APPLICATION

UV adhesive:

U-9100A is used as the main resin for UV optical adhesives and electronic packaging adhesives, with good insulation and arc resistance. Low viscosity, good fluidity, high refractive index, good resistance to moisture and heat, aging resistance, and no yellowing.

UV coating:

Low film thickness and high performance, suitable for optical fiber coating. Low viscosity solvent-free spraying, hardening, hydrophobic, oleophobic and other special coating carrier resins, lower viscosity and higher hardness and protective functions.

3D printing:

SLA industrial-grade 3D printing main resin has high molding accuracy, no yellowing, and is suitable for 355nm laser light sources. 25-100um film thickness, rapid curing with low exposure, and molding modulus with ABS-like plastic characteristics.

INTERMISCIBILITY

monomer:

It is recommended to use UM-440 monomer to reduce the viscosity without losing the curing speed. When using ultra-high molding thickness, it is recommended to add VM-3510 or VM-3520 vinyl ether monomer to promote deep cross-linking and curing.

Solvent: All types of conventional organic solvents are compatible.

polymer:

It is completely compatible with Ultramodern series cationic resins, and the formula can be adjusted according to application requirements.

Comparison of similar products

Characteristics	9100A	9100B	9210	9310
Viscosity	1	2	3	5
Hardness	8	7	7	5
Adhesion	3	5	6	9
Flexibility	2	9	7	5
Cure speed	9	8	6	5

Corresponding ratio: 1 is the lowest---10 is the highest

More detailed application references and MSDS docket