

U-9310

Cationic Photocurable Resin

INTRODUCTION

U-9310 resin is a cationic and free radical hybrid system UV resin with the best adhesion ability. It is recommended for use on the surfaces of organic and inorganic materials that are difficult to adhere to, such as glass, ceramics, and metals. Balanced hardness and flexibility, excellent water and chemical resistance. Grafted acrylate improves construction application performance and can be fully cured under 800-1000mj energy. Mixed with sulfonium salt and iodonium salt cationic photoinitiators, it can be used in UV coatings, inks, special adhesives that require extremely low shrinkage and high refractive index, optical fiber coatings, electronic inks and other fields with good results.

TYPICAL VALUES

Tg(°C)	65
MW(GPC)	1900
Elongation at Break%	45
Colour, Gardner	1
Acid value,mg KOH/g	max. 2
Viscosity at 25°C,mPa.s	10000-16000
Specific Gravity	1.02
Effective content	100%

APPLICATION

UV adhesive:

U-9310 is used as the main resin for UV bonding and can provide excellent bonding performance. In some opaque materials, 9310 resin can be used for bonding, which has obvious post-curing characteristics. By adding the corresponding curing agent, a dual curing reaction can be adopted to improve the final performance of the product.

UV coating:

Recommended for use in various types of modified plastics that are difficult to adhere to, industrial material coating, metal motorcycle coatings, glass ceramic coatings, UV vacuum plating, nano-plating coatings, and has excellent adhesion to the coating. The scratch resistance, wear resistance and chemical corrosion resistance are better than those of high functionality free radical systems, while maintaining high hardness and flexibility.

UV ink:

Provides protection, insulation, anti-etching and other functions on UV iron printing ink, metal nameplates, copper-clad laminates, metal plating and other surfaces.

INTERMISCIBILITY

monomer:

It is recommended to use VM-3530 or VM-3540 monomer to reduce the viscosity and improve the adhesion ability. Or it can be combined with acrylate (TMPTA, PET3A, etc.) UV monomer to increase the initial cross-linking speed.

Solvent: All types of conventional organic solvents are compatible.

Polymer: It is completely compatible with Ultramodern series cationic resin, and the formula can be adjusted according to the 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