

## L-9861W Water-based 6-functional UV Polyurethane Resin

### Description

L-9861W is a water-based 6-functional UV polyurethane aqueous solution modified by a special process. It has fast curing speed, high hardness, good wear resistance, good scratch resistance, and good chemical resistance. Can be co-soluble with other water-based UV resins.

### Technical Data

Appearance	White emulsion
Viscosity (25°C, CPS)	1,000 - 2,000
Solid Content (%)	65 ± 2
Density (g/cm <sup>3</sup> , 25°C)	1.1 ± 0.05
PH Value	3 - 6
Functional Groups	6

### Product Features

It has good adhesion to ABS, ABS/PC, PC and wood, and has good pigment wettability.

Good hardness and good scratch resistance (nails, pencils, coins)

Excellent water resistance, scrub resistance and alkali resistance, good stain resistance

### Applications

Waterborne UV coatings for plastics; waterborne UV topcoats for wood

### Precautions

1. The recommended diluent is tap water : isopropanol (or ethanol) at a ratio of 1 : 1. Additional solvents such as PMA may also be added as needed in the formulation.
2. This resin can be used on its own to formulate a clear varnish, suitable for sealing, protection, or gloss finishing on metal surfaces or wood substrates.
3. For non-absorbent substrates requiring high chemical and solvent resistance, hot-air drying is recommended prior to UV curing.
4. Curing conditions: a UV lamp with 3000 W or higher output. The optimal curing effect and fastest speed are achieved when the lamp-to-surface distance is within 7 cm; if the distance is greater, the exposure time should be appropriately increased.

### Storage Conditions

To prevent premature polymerization due to the high reactivity of this product, keep it tightly sealed and store away from heat sources and direct sunlight. It is recommended to maintain storage temperature below 30 °C. Unused product should be promptly resealed and must not be left open. Under ventilated conditions at 25 °C, the product has a safe storage period of 6 months. Available packaging: 20 kg / 200 kg per drum

**Tips:L-9861W is a high-functional waterborne UV resin with excellent abrasion resistance, good boil-water resistance, and strong RCA resistance.**

Note: Technical data represents typical values only. In view of the differences in formulas, production process, conditions, all the above statements must be adjusted according to the actual situation, our company does not make any promises. Our company reserves the right to reform its products without prior notice of any changes.