

## SQ-720010 UV Self-healing Varnish

### Description

**SQ-720010** single-component UV hardening liquid is mainly used for hardening the surface of PC, PET, TPU, PVC or membrane materials. It can be applied by spraying, shower coating, roller coating and other methods. After the coating is formed into a film, it has good adhesion to the substrate and can protect the surface of the coated material for a long time. The coating process is simple and the production efficiency is high. The coating has good optical properties, will not produce rainbow streaks, has high cross-linking density, low curing shrinkage and good self-healing properties. It can be used to make texture decoration and shell molding for mobile phone screen films, laptop screen protectors, home appliances and other products.

### Technical data

Test items	Test Data
Appearance	Transparent liquid
Viscosity (25°C, CPS)	9.5-11
Solid content (%)	50±2
Density (g/cm <sup>3</sup> , 25°C)	0.90±0.05
Hardness (1Kg force load)	HB
Coating thickness (μm)	12-15
Boiling performance (surface spray paint, no primer 100°C/60min)	Adhesion 5B, no change in coating
Bend and fold	Folded in half many times without cracking
Curing energy (mercury lamp, mj/cm <sup>2</sup> )	600-1000
QUV resistance	More than 200h
Slippery degree	Well
Anti-graffiti (Zebra oil-based pen)	Well
Water contact angle	105°

Note: The above performance parameters can be customized according to customer requirements

### Performance

The product is suitable for hardening treatment on rolls and film surfaces, such as TPU, PVC, PC, PET, etc.;

It has good wetting properties on the substrate. After film formation, the coating is smooth and flat, with high gloss, high hardness and smooth feel;

Excellent wear resistance and scratch resistance, good self-healing properties;

Low shrinkage and good adhesion to TPU.

### Applications

It can be used to make texture decoration and shell molding for mobile phone screen films, laptop screen protectors, home appliances and other products.

## Construction technology

1. The commonly used coating methods for UV-type universal wear-resistant hardening fluid are spray coating, shower coating, and roller coating. Please avoid exposure to sunlight;
2. The product does not require any pre-treatment (including dilution). It is recommended to shake before coating to make the liquid evenly distributed;
3. When performing shower coating, the nozzles of the shower coating equipment should be sprayed from the same horizontal line from left to right. Please refer to the equipment manufacturer's instructions for the specific process;
4. After the shower coating is completed, keep the plate running vertically for about 2 minutes so that the surface can be freely evaporated and leveled, and then enter the 60-70°C drying tunnel and maintain vertical heating for 5 minutes;
5. After heating, enter the UV curing lamp area for routine curing. It is recommended that the specific curing time be adjusted according to the energy of the lamp. If conditions permit, the time can be extended appropriately, which will help improve the hardness of the film layer; (during the test experiment, the energy of the ultraviolet curing lamp was 2000W, and the length of the lamp tube was 30cm)
6. After curing, cool the plate to room temperature and then measure its performance directly;

## Precautions

1. This product has been diluted to a solid content and viscosity suitable for shower coating, and does not need to be diluted before use. If customers need high solid content and dilutable products, our company can provide corresponding high solid content products and corresponding diluents according to the customer's specific requirements;
2. This product contains flammable components, please pay attention to fireproof during transportation, storage and use.

## Storage

To prevent the product from polymerization and gelling, please keep it sealed and away from heat and light. Recommended storage temperature is not higher than 30°C. Unused products must be sealed and stored in a timely manner and cannot be stored in the open. Safe storage time is 6 months at room temperature( 25°C) and under ventilation. 1KG/5KG/25KG/barrel

**Tips:SQ-720010 has good self-healing properties, small shrinkage, good slipperiness and good transparency.**

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.