

SQ-720003 Wear-resistant Hardening UV Varnish

Description

SQ-720003 single-component UV hardening liquid is mainly used for hardening the surface of PC, PET, PMMA, PC/PMMA composite sheets or membranes. 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, does not produce rainbow streaks, has high cross-linking density, low curing shrinkage, extremely high hardness, excellent wear resistance, and good anti-graffiti performance. It can be used to make texture decoration and shell molding for mobile phones, laptops, home appliances and other products. The product has high hardness, good chemical resistance, high transparency and stain resistance, and is resistant to steel wool 1000-3000 times.

Technical data

Appearance	Slightly transparent liquid
Viscosity (Iwata – 2 cups)	8.5-9.5 S
UV component (%)	35±2 %
Density (g/cm³, 25°C)	0.90±0.05

Coating performance

Test items	Test Data
Hardness (1Kg force load)	3H—5H
Coating thickness (μm)	5-15
Boiling performance (surface spray paint, no primer 100°C/60min)	Adhesion 5B, no change in coating
Bending (cylindrical shaft diameter)	40mm
Curing energy (mercury lamp, mj/cm²)	600-1,000
QUV resistance	More than 500h
Anti-friction performance (1Kg load-bearing, wear-resistant machine, 1*1 grinding head, 0000# steel wool)	2500 times, no wear marks
Anti-graffiti (Zebra oil-based pen)	Oleophobic lines, easy to wipe off
Water contact angle	105-110°

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

Performance

The product is suitable for hardening the surface of PC, PET, PMMA, PC/PMMA composite sheets and other sheets and film materials.

Oil-resistant pen for graffiti, easy to clean, water contact angle 105-110°

Has a smooth feel

Excellent wear resistance and scratch resistance, resistant to steel wool for more than 2500 times

Good substrate wetting properties, low surface energy of the coating after film formation

It has good resistance to high and low temperatures, high humidity, chemical solvents, moisture resistance, and UV resistance. The product performance remains stable in harsh environments.

Applications

Texture decoration and shell molding of mobile phones, laptops, home appliances and other products.

Construction technology

1. The commonly used coating methods for UV wear-resistant hardening fluid are spraying, 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 dispersion more even;
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 to allow the surface to evaporate and level, then enter the 60-70°C drying tunnel and keep it vertically heated for 5 minutes;
5. After heating, enter the UV curing lamp area for routine curing. The specific curing time is recommended to 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; (The energy of the UV curing lamp during the test experiment was 2000W. Lamp tube length 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 fire prevention 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-720003 Wear-resistant and easy-to-clean hardening liquid, good yellowing resistance, good transparency, wear-resistant and easy to clean, hardness 2-5H, water contact angle 105-110°, steel wool resistance more than 2500 times.

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.