

SQ-710005 High-smoothness UV Texture Transfer Coating

Description

SQ-710005 is a one-component UV-curable adhesive that is formed on the surface of PC, PET, TPU and other films through molds with various textures and structures. Small molds can be manually transferred to the film surface in batches, or roller transfer or textured film transfer with a more automated, high-capacity structure can be used. It is mainly used for texture decoration and shell molding of mobile phones, laptops, home appliances and other products. The product has very good demoulding performance, high hardness, high smoothness, anti-fouling and wear resistance, and anti-UV aging properties.

Technical Data

Test Items	Test Data
Appearance	Transparent liquid
Viscosity (25°C, CPS)	500 - 1,500
UV Content (%)	100
Density (g/cm ³ , 25°C)	1.03 ± 0.05
Hardness (1Kg force load)	2H—4H
Coating Thickness (μm)	5 - 25
Boiling Performance (surface spray paint, no primer 100°C/60min)	Adhesion 5B, no change in coating
Bending (cylindrical shaft diameter)	35 mm
Curing Energy (mercury lamp, mj/cm ²)	600 - 1,000
QUV Resistance	More than 200h
Anti-friction Performance (1 kg load, abrasion tester, 1×1 cm abrasive head, 0000# steel wool)	100 times, no wear marks
Anti-graffiti (Zebra oil-based pen)	Good smoothness
Water Contact Angle	Over 95°

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

Product Features

High hardness, high smoothness, good stain resistance, and excellent wear resistance

Good yellowing resistance and high transparency

Excellent resistance to high/low temperature, high humidity, chemical solvents, moisture, and UV exposure; maintains stable performance under harsh conditions

Applications

Textured decoration and housing formation for products such as mobile phones, laptops, and home appliances.

Application Process

1. Clean the surface of the substrate.
2. Pour the adhesive into the metal mold and press the PC or PET film onto the mold. Use a rubber roller to press and level the adhesive, ensuring that air bubbles are removed and the bonding areas are fully covered.
3. Irradiate with a UV lamp at wavelengths of 265 or 395 nm. Keep the lamp as close as possible to the adhesive to accelerate curing.
4. Peel the PC or PET film from the metal mold. The adhesive layer will release completely and adhere to the PC or PET surface.
5. If the adhesive layer is not fully cured, continue UV irradiation until full curing is achieved.

Process Flow

Unwinding → Coating onto specially treated release film → Mold/roller pressing → UV curing → Demolding → Rewinding → Ink printing → Slitting → Forming → Injection molding → Peeling off surface polyester film → Spraying hard coat

Precautions

1. Ensure that the UV adhesive layer receives sufficient UV energy to achieve complete curing; inadequate irradiation may compromise the coating performance.
2. Do not pour leftover adhesive back into the original container. Store the remaining material in a sealed, light-proof condition at room temperature.

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: 1 kg / 5kg / 25 kg per drum

Tips: SQ-710005 is a high-smoothness UV transfer adhesive with excellent smoothness, good yellowing resistance, high transparency, and strong stain and wear 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.