SQ-710003 Wear-resistant Matte UV Texture Transfer Coating

Description

SQ-710003 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 automated, high-capacity structural rollers or textured film transfer can be used. It is mainly used to make texture decoration and shell molding for mobile phones, laptops, home appliances and other products. The product has the characteristics of good demoulding performance, high hardness, good plating properties, excellent recoating performance and UV aging resistance.

Technical Data

Test Items	Test Data
Appearance	Transparent liquid
Viscosity (25ºC, CPS)	150 - 250
UV Content (%)	100
Density (g/cm³, 25ºC)	1.03 ± 0.05
Hardness (1Kg force load)	B - H
Coating Thickness (μm)	5 - 25
Boiling Performance (surface spray paint, no primer 100℃/60min)	Adhesion 5B, no change in coating
Bending (cylindrical shaft diameter)	No cracking after 180° bend
Curing Energy (mercury lamp, mj/cm²)	600 - 1,000
QUV Resistance	Over 200h
Note: The above performance parameters can be customized according to customer requirements	

Product Features

Delicate matte finish with good hand feel and scratch resistance
Good yellowing resistance and high transparency
Good tensile strength, low shrinkage; forms a flexible protective layer after curing with a film thickness of 10–100 μm
No cracking, deformation, or delamination after 180° bending
Excellent resistance to high/low temperatures, 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 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(25ºC) and under ventilation. 1KG/5KG/25KG/barrel

Tips: SQ-710003 wear-resistant matte UV texture transfer coating, with fine matte effect, good hand feel, good scratch resistance and low viscosity.

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.