SQ-710006 Wear-resistant & Easy-to-clean UV Texture Transfer Coating

Description

SQ-710006 is a single-component UV-curable adhesive that can be molded onto PC, PET, TPU, or other film substrates using various textured or structural molds. It can be manually transferred in small batches using small molds, or via automated, high-throughput structural rollers or textured film transfer systems. It is primarily used for creating textured decorative surfaces and forming housings for products such as mobile phones, laptops, and home appliances. The product features good release performance, high hardness, excellent wear and stain resistance, easy-to-clean surface, and strong UV-aging resistance.

Technical data

Test Items	Test Data
Appearance	Transparent liquid
Viscosity (25ºC, CPS)	300 - 800
UV Content (%)	≥ 80%
Density (g/cm³, 25ºC)	1.03 ± 0.05
Hardness (1Kg force load)	2H—5H
Coating Thickness (μm)	5 - 25
Boiling Performance (surface spray paint, no primer 100℃/60min)	Adhesion 5B, no change in coating
Bending (cylindrical shaft diameter)	35 mm
Curing Energy (mercury lamp, mj/cm²)	600 - 1,000
QUV Resistance	Over 200h
Anti-friction Performance (1 kg load, abrasion tester, 1×1 cm abrasive head, 0000# steel wool)	1000 times, no wear marks
Anti-graffiti (Zebra oil-based pen)	Oleophobic line pattern, easily wiped off
Water Contact Angle	105 - 110°

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

Product Features

High hardness, high smoothness, excellent stain resistance and easy-to-clean, and excellent wear resistance
Good yellowing resistance and high transparency
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 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-710006 is a high-wear, easy-to-clean UV transfer adhesive with good yellowing resistance, high transparency, excellent structural moldability, and easy processability.