

SQ-720006 BOPP Scratch-resistant UV Varnish for Casting

Description

SQ-720006 single-component UV-curable adhesive is formed on the surface of BOPP light film, paper, PVC 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. The product has the characteristics of good demoulding performance, high gloss, high leveling, high hardness, anti-UV aging, anti-scratch and wear resistance.

Technical Data

Test Items	Test Data
Appearance	Transparent liquid
Viscosity (25°C, CPS)	70 - 120
UV Content (%)	100
Density (g/cm ³ , 25°C)	1.03 ± 0.05
Hardness (1Kg force load)	1H - 3H
Coating Thickness (μm)	3 - 5
Boiling Performance (surface spray paint, no primer 100°C/60min)	Adhesion 5B, no change in coating
Flexibility	Stretch 50% without bursting
Curing Energy (mercury lamp, mj/cm ²)	600 - 1,000
QUV Resistance Performance	Over 500h
Anti-friction Performance (4 pounds load, wear-resistant machine)	Over 1000 times
Gloss	6 - 8°

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

Product Features

Matte finish, wear-resistant, high adhesion, and good yellowing resistance. Depending on the production process, the coating can achieve velvet, rubber, or suede-like textures. The coated surface is uniform, smooth, and glossy, with no bubbling, curling, or lifting at edges.

The coating surface is suitable for screen printing and hot stamping.

Applications

Suitable for various substrates such as paper, PVC, PET, PP matte films, and BOPP glossy films. Ideal for producing high-end signage or printed products, enhancing the surface appearance and giving a more luxurious finish.

Application Process

1. Clean the material surface.
2. Pour the UV varnish into the metal mold, ensuring that the BOPP glossy film or paper is in full contact with the mold. Use a spatula or squeegee to press the surface, removing air bubbles and achieving better leveling. Ensure that all areas intended for adhesion are fully coated with varnish.
3. Expose the coated substrate to a UV lamp with a wavelength of 265 or 395 nm. Position the lamp as close to the varnish as possible to accelerate the curing process.
4. Peel the BOPP glossy film or paper from the metal mold. At this stage, the varnish layer should fully release from the mold and adhere to the substrate surface.
5. If the varnish layer is not fully cured, continue UV exposure until the coating is completely cured.

Process Flow

Unwinding → Coating onto specially treated release film → Mold roller pressing → UV curing → Demolding → Rewinding → Ink printing, etc. → Slitting → Forming → Injection molding → Peel off surface polyester film → Spray hard coating layer

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-720006 has low gloss, good toughness, good yellowing resistance and good hand feel.

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.