HOT MELT ADHESIVE

Thermoplastic Polyurethane Powder

UT-1007

United UT-1007 is a polyester-based thermoplastic polyurethane hot melt adhesive powder developed for screen heat transfer printing and shoe material applications. With a low melting range of 100–125°C and a soft, flexible bond line, it delivers strong adhesion to demanding substrates including PVC, PU, woven and knitted fabrics, and genuine leather. Supplied as a free-flowing white powder in four screened particle-size grades from 0–80 to 200–500 micron, UT-1007 can be matched to different screen meshes, powder-scatter coating lines and lamination processes. It is the workhorse grade behind durable, wash-resistant transfers on sportswear, elastic garments and footwear.

KEY FEATURES

- Low melting range (100–125°C) — energy-saving pressing conditions and safe processing on heat-sensitive substrates
- Soft grade with flexible bond line — maintains elasticity and hand feel on stretch and elastic fabrics
- Strong adhesion to PVC, PU, fabric and genuine leather — one grade covers the most common transfer-printing substrates
- Four particle-size grades (0-80 / 80-180 / 100-300 / 200-500 μm) — matched to screen mesh, powder-scatter equipment and required dot weight
- Good wash resistance — transfers survive repeated domestic laundering
- Polyester-based, solvent-free powder — clean processing with no volatile emissions during pressing

TECHNICAL SPECIFICATIONS

Property	Value
Material	Polyester-based thermoplastic polyurethane
Character	White powder
Flow beginning temperature	95°C
Melting range	100-125°C
Density	1.2 g/cm³
MFR (150°C, 2.16 kg)	10-25g/10 min
Particle size	0-80, 80-180, 100-300, 200-500 μm
Packaging	1 kg / 2 kg / 5 kg aluminum-plastic bags, or 20 kg paper bags

TYPICAL APPLICATIONS

UT-1007 is used wherever a soft, elastic and wash-resistant bond is required on fabric-based substrates. In screen heat transfer printing, it is scattered or printed onto release film to produce hot-fix transfers for fashion, sportswear, workwear and team apparel, bonding reliably to cotton, polyester and elastic blends. In the shoe material industry, it laminates and reinforces counters, linings and decorative panels made of PU, PVC or genuine leather. Typical uses also include bonding embroidered patches and badges, laminating technical textiles, and assembling leather goods where a visible glue line is unacceptable. Because pressing takes place at moderate temperatures, converters can process UT-1007 on standard heat presses and powder-scatter lines without special equipment

In DTF transfer printing, UT-1007 is scattered at 80-180 micron over the wet ink and cured at 95-110 °C. Its elasticity keeps prints from cracking on stretch fabrics, and the wide processing window tolerates normal press variation

PACKAGING AND STORAGE

- Supplied in standard export packaging; roll width, length and liner options confirmed on order.
- Store in a dry, ventilated place below 30 °C, away from direct sunlight, moisture and ignition sources.
- Shelf life: 12 months in unopened original packaging. Reseal opened rolls and use them within the period stated above.

> **Handling note:** Hot melt adhesives are applied molten. Use a suitable dispenser or laminator with accurate temperature control and keep hands clear of the melt and heated surfaces.

The values above are typical test results obtained under standard laboratory conditions and are provided for reference in product selection. They do not constitute a specification or warranty of performance in a particular application, because bonding results depend on substrate, equipment, line speed and ambient conditions. We recommend a trial run on your own production line before commercial use. Shanghai United Industry Co., Ltd reserves the right to revise this document without notice.

Shanghai United Industry Co., Ltd · Building 2, No. 315, Weichang Road, Jinshan District, Shanghai, China

www.uniteindus.com · info@uniteindus.com