HOT MELT ADHESIVE

Thermoplastic Polyurethane Powder

UT-1290

United UT-1290 is an aliphatic polyester-based thermoplastic polyurethane hot melt adhesive powder, specially developed for applications where yellowing resistance is critical. Unlike conventional aromatic TPU grades, the aliphatic chemistry of UT-1290 keeps white and light-coloured transfers looking clean after repeated washing and long exposure to sunlight. With a low melting range of 105–130°C and a soft, flexible bond line, it delivers strong adhesion to PVC, PU, woven and knitted fabrics, and genuine leather, with better color fastness than standard grades. UT-1290 is the grade of choice for premium screen heat transfer printing on high-quality and elastic products: white logos on sportswear, light-coloured fashion prints, and any design where yellowing would be immediately visible.

KEY FEATURES

- Aliphatic TPU base — outstanding yellowing resistance — stays white on white: no yellow shift after washing, sunlight or long storage
- Better color fastness — designed for white, pastel and light-coloured fabrics where discoloration is unacceptable
- Low melting range (105–130°C) — gentle pressing that protects elastic and delicate substrates
- Soft grade with flexible bond line — preserves the stretch and hand feel of high-elasticity garments
- Strong adhesion to PVC, PU, fabric and genuine leather — same substrate coverage as the UT-1007 workhorse grade
- Four particle-size grades (0-80 / 80-180 / 100-300 / 200-500 μm) — matched to screen mesh, powder-scatter lines and required dot weight

TECHNICAL SPECIFICATIONS

Property	Value
Material	Aliphatic polyester-based thermoplastic polyurethane
Character	White powder
Flow beginning temperature	100°C
Melting range	105-130°C
Density	1.2 g/cm³
MFR (150°C, 2.16 kg)	20 g/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-1290 is specified wherever a transfer must stay visually pure over time. In white and light-coloured sportswear, it keeps large-area logos and numbers bright after dozens of wash cycles. In fashion and premium apparel, it carries pastel and light-grey designs on elastic fabrics without the dull yellow cast that aromatic TPU powders develop. It is equally suitable for baby and children's clothing, where light colours and strict appearance standards are the norm, and for white PU and leather goods — shoe decorations, bag panels and badges — where any yellowing would reject the product. Because it is a powder for screen heat transfer printing, UT-1290 drops into the same powder-scatter and pressing workflows as standard grades: no new equipment, just a cleaner result

For DTF work, UT-1290 is the grade specified where the print must stay visually pure: aliphatic TPU resists yellowing, and the 80-180 micron cut gives an even scatter on white and light-coloured garments

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.

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