HOT MELT ADHESIVE

Thermoplastic Polyurethane Hot Melt Powder

UT-1007

Product description

UT-1007 is a polyester-based thermoplastic polyurethane hot melt adhesive supplied as a free-flowing white or slightly yellowish powder. It is a soft grade with a low adhesion temperature and forms a flexible bond line with good adhesion strength to PVC, PU, fabric and genuine leather.

The grade is used mainly in screen heat transfer printing and shoe-material applications. Its low melting range and soft hand feel make it suitable for heat-sensitive substrates, while its bond strength gives durable transfers on sportswear, elastic garments and footwear.

Key features

- Good adhesion strength to PVC, PU, fabric and genuine leather - one grade covers the common transfer-printing substrates
- Soft grade with a flexible bond line - keeps the stretch and hand feel of elastic fabrics
- Low melting range - energy-saving pressing and safe processing on heat-sensitive substrates
- Free-flowing powder in several screened cuts - matched to screen mesh, scatter equipment and dot weight
- Polyester-based, solvent-free powder - clean processing with no volatile emissions during pressing

Technical specifications

Property			
Chemistry	-	Polyester-based thermoplastic polyurethane	-
Appearance	-	White or slightly yellowish powder	-
Melting range (DSC)	°C	95-105	DSC
Hardness	Shore A	73	ASTM D 2240
Melt flow rate (typical)	g/10min	15-25	ASTM D 1238 (150 °C, 2.16 kg)
Tack-free time	min	12-15	-
Wash resistance (indicative)	40 °C	excellent	-
	60 °C	good	-
	90 °C	unsuitable	-

Melt flow rate is a typical production value. Wash resistance is indicative from reference wash tests and acts as a selection guide, not a guaranteed rating; the limit on a given article depends on substrate, add-on and wash cycle and is confirmed by testing.

Recommended adhesion conditions

Product			
UT-1007	110-130	1.5-3.0	10-20

Conditions are starting points for trials; adjust to substrate, equipment and line speed.

Particle size

Supplied in the following screened cuts (typical):

- 0-80 µm - fine mesh and paste printing
- 80-200 µm - dot coating and scatter lamination
- 100-200 µm - controlled dot weight on fine scatter work
- 100-250 µm - heavier scatter and higher grammage

Other distributions can be supplied to customer requirement.

Packaging

20 kg kraft paper bag, or 1 kg aluminium-plastic multi-layer package. Other pack sizes can be arranged against the order quantity.

The values above are typical figures from production testing and are not a specification. Tolerances and test methods are confirmed per grade and per order. The information is provided for reference only; the specification will be provided in the quality certificate or in the contract. It is the user's responsibility to test the material and its suitability for a process.

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