

Technical Data Sheet

PEARLBOND™ 523 is a linear, polycaprolactone-based polyurethane, supplied in form of small white granules, which combines an extremely high crystallization rate with a very high thermoplasticity level.

USES: Hot Melt Adhesive

PRODUCT SPECIFICATION

Melt Flow Index (170° C / 2.16 Kg)	60–100 g/10 min	ISO 1133
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PRODUCT CHARACTERISTICS

Property	Typical Values*	Test Method
Density @ 20° C	1.19 g/cm ³	ISO 2781
Hardness	54D	ISO 868
OH Value	< 3 mg KOH/g	LZMM-RD01-47-A
Moisture Content	< 0.15%	LZMM-RD01-44
Crystallization	7–10 min	LZMM-RD01-12-A
Melt Viscosity @ 130° C; 2.16Kg	380 Pa. s	ISO 1133
Melt Viscosity @ 160° C; 2.16Kg	180 Pa. s	ISO 1133
Softening range	55 – 60	LZMM-RD01-70
Melting range	60 – 65	LZMM-RD01-70
Thermoplasticity	Very High	LZMM-RD01-68-A

*These typical values provide general information, not for use as product specification.

APPLICATIONS

PEARLBOND™ 523 can be added to formulations of REACTIVE POLYURETHANE HOT-MELTS (*HMPUR*), to improve the crystallisation speed.

PEARLBOND™ 523 is also suitable for extrusion and powder coating as HMA. Especially for coating textiles to be used in the manufacture of shoe-stiffeners (**Toe puff and counters**) or in heat-sealable fabrics (**Thermobonding**). It also could be used for low temperature thermo-moulding applications in **orthopaedic** for instance.

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PROCESSING CONDITIONS

PEARLBOND™ 523 can be processed by slot die and blown extrusion. The recommended starting temperature profile is:

	°F/°C
Zone 1	221/105
Zone 2	257/125
Zone 3	266/130
Zone 4	266/130
Die Zone	284/140

HEALTH AND SAFETY

A safety data sheet on **PEARLBOND™ 523** is available, with all safety information. The usual safety practices in the handling of chemicals should be observed, i.e.: good ventilation in the working area, gloves and protective goggles.

PACKAGING

Multifoil paper bags and PE bags containing 25 Kg.
Pallet of 750 Kg of weight.

STORAGE

PEARLBOND™ 523 must be stored in a cool (< 25° C) and environment prior to being processed. Standard practice of consuming resin on first-in first-out basis should be employed.

For further information refer to Lubrizol Advanced Materials processing guides.

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