

**Technical Data Sheet**

**Pearlbond® 223** 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. It is used for Hot Melt adhesives.

**SPECIFICATION**


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**Melt Flow Index** (170°C / 2.16 Kg)    **60 - 100**    g/10 min    ISO 1133

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**CHARACTERISTICS**

Property	Typical values *	Test Method
Density @ 20°C	1.19 g/cm <sup>3</sup>	ISO 2781
Shore Hardness	54D	ISO 868
Melt Viscosity (160°C/ 2.16 Kg)	650 Pa.s	ISO 1133
Softening range	55 – 60° C	MQSA 70A
Melting range	64 – 68° C	MQSA 70A
Crystallization rate	Very High	MQSA 12A
Thermoplasticity	Very High	MQSA 68A

\* *These are typical values & should not be used for establishing specifications.*

**APPLICATIONS**

**PEARLBOND™ 223** is suitable for use in extrusion and powder applications where the following features are of high value to the customer:

- Gel free quality
- High thermoplasticity
- Fast crystallization rate

**PEARLBOND™ 223** could be used for low temperature **thermo-molding** applications as orthopaedic, DIY markets, for instance.

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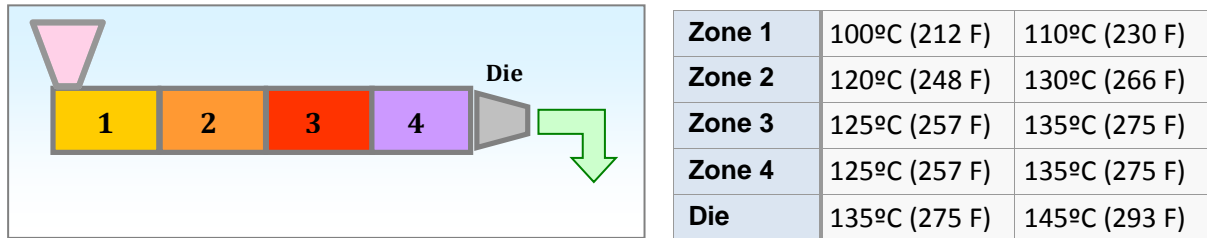


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Pearlbond® 223 could be also used for making heat-sealable fabrics (**thermo-bonding**), obtained by coating processes such as films, webs, nets, scattering and dot-coating (powder or paste).

## WORKING INSTRUCTIONS

The suggested processing-temperature profiles for film extrusion (flat films) are depicted in the figure below:



**Type.-** 30/25d (l/d=25:1), **Cooling.-** air, **Screw.-** 3:1, **Speed.-** 40-50 rpm **Breaker plate.-**, **Thickness die.-** 0,2 mm

## HEALTH AND SAFETY

A safety data sheet on **Pearlbond® 223** is available, with all information related to safety. 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 of 25 Kg. or PE bags of 25 kg and Carton box.

Bags are shipped on pallets of 750 kg.

## STORAGE

**Pearlbond® 223 STORAGE** must be stored in a cool (15–25°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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