

Technical Data Sheet
Type: Polycaprolactone Copolyester Thermoplastic Polyurethane (TPU)

Features: Low Melting Point with Excellent Transparency, Elasticity and Ease of Processing, Improved Adhesion to Polar Surfaces

Uses: Extrusion, Solution Cast Films; Compounding with PVC

Physical Properties	Value (Metric)	Unit	Test Method
Appearance	Translucent		Visual
Hardness (5 sec)	70	A	ISO 868
Specific Gravity	1.16	g/cm ³	ISO 2781 (ASTM D-792)
Tensile Strength	20 (2900)	MPa (psi)	ISO 527
Ultimate Elongation	750	%	ISO 527
Tensile Stress at:			
- 100 % Elongation	3 (435)	MPa (psi)	ISO 527
- 300 % Elongation	4 (580)	MPa (psi)	ISO 527
Tear Strength	6.84 (286)	kg/mm (lb./in)	Graves ASTM D-624 (Die C)
Taber Loss	45	mm ³	DIN 53,516
Softening range	100-110	° C	LZMM-RD01-70
Melting range	120-130	° C	LZMM-RD01-70
Activation temperature	100	° C	LZMM-RD01-70
Melt viscosity (160° C, 2.16 Kg)	890	Pa.s	ISO 1133
Glass Transition	-30 (-22)	° C (° F)	DIN 51,007

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

Regulatory Status: None

Material Preparation

- Prior to processing, **PEARLBOND™ DIPP119** must be dried at **60-70° C** for 2-3 hours.
- It is recommended to dry the material in a desiccant type dryer. Target dew point should be **-40°C**.
- Depending on the applied processing technique, the maximum moisture level should be 0.02%.

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Processing Conditions

PEARLBOND™ DIPP119 can be processed on any conventional extruder.

Recommended Starting INSERT INJECTION MOLDING/EXTRUSION Temperature Profile:

	°F/°C
Zone 1	266/130
Zone 2	311/155
Zone 3	338/170
Zone 4	347/175
Die Zone 1	311/155

For further information refer to Lubrizol Advanced Materials processing guides.

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