

**Type:** Estaloc<sup>®</sup> 61225 Alloy RETPU is a Polyester-Type Thermoplastic Alloy

**Features:** Fast Cycling, Dimensional Stability, Durability, Aesthetics, Low Temperature Impact

**Uses:** Injection Molding

Physical Properties	Value (Metric)	Unit	Test Method
Hardness (5 sec)	64 +/- 3	Shore D	ASTM D-2240
Specific Gravity	1.11		ASTM D-792
Tensile Strength	4,600 (32)	psi (MPa)	ASTM D-638
Tensile Modulus	150,000 (1030)	psi (MPa)	"
Elongation	180	%	"
Flexural Strength	4,100 (28)	psi (MPa)	ASTM D-790
Flexural Modulus	120,000 (830)	psi (MPa)	"
Izod Imapct		Ft-lb's/in. (J/M)	ASTM D-256
@ 73°F (23°C)	18 (960)		
@ -40°F (-40°C)	1.2 (64)		

- Prior to testing samples were conditioned at 23°C for 48 hours.
- Based on extruded sheet (30 mils).
- Listed values are "typical (average) values" and should / can not be applied for specification purposes.

### Supply Form and Standard Packaging

- Estaloc<sup>®</sup> 61225 Alloy RETPU is supplied in pellet form and packaged in 50 lb bags or 1000 lb boxes.

### Material Preparation

- Prior to processing, Estaloc<sup>®</sup> 61225 Alloy RETPU must be dried at **220°F (104°C)** for 2-4 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%.

### Processing Conditions

- Estaloc<sup>®</sup> 61225 Alloy RETPU can be processed on most conventional injection molding machines.

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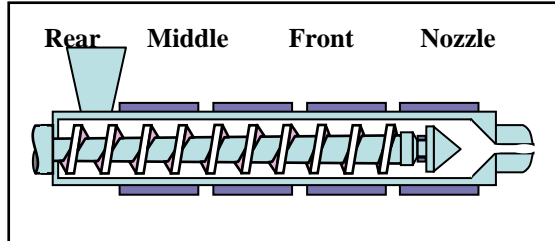


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**Recommended Starting Injection Molding Temperature Profile:**



	°F/°C
<b>Rear</b>	<b>430/221</b>
<b>Middle</b>	<b>440/226</b>
<b>Front</b>	<b>440/226</b>
<b>Nozzle</b>	<b>450/232</b>
<b>Melt</b>	<b>450/232</b>

\* Melt temperature by pyrometer check of air shot

**Fill Rate:** Slow to Moderate

**Screw RPM:** 30-80

**Back Pressure:** 50 psi

**Injection Pressure:** 10,000-15,000 psi (69-103 MPa)

**Holding Pressure:** 5,000-10,000 psi (35-69 MPa)

Properties	Value (Metric)	Unit	Test Method
<b>Thermal Data</b>			
<b>Heat Deformation Temperature</b>			ASTM D-648
66 psi	156 (69)	°F(°C)	-
264 psi	135 (57)	°F(°C)	-
<b>Shrinkage (average flow and against flow), disc</b>	0.005	in / in	ASTM D- 955
<b>Shrinkage, flex bar</b>	0.004	in / in	ASTM D- 955

**For further information refer to Lubrizol Advanced Materials processing guides.**