

LONGLITE® TPEE 1172LL

Chang Chun Plastics Co., Ltd. (CCP Group) - *Thermoplastic Polyester Elastomer*

General Information

Product Description

1172LL is high modulus grade with nominal Durometer hardness of 72D. It contains non-discolour stable antioxidants. It can be processed by thermoplastic processing techniques like injection molding grade.

CHARACTERISTICS

1. Excellent high modulus for injection molding grade.
2. Excellent flexibility and fatigue resistance.
3. Excellent creep resistance.
4. Excellent low shrinkage and higher melting temperature

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• Antioxidant		
Features	• Antioxidant	• Fatigue Resistant	• Good Flexibility
	• Creep Resistant	• Good Color Stability	• Low Shrinkage
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.28	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	30	g/10 min	ISO 1133
Molding Shrinkage	1.0	%	ISO 294-4
Water Absorption (24 hr, 73°F)	0.30	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	124000	psi	ISO 527-1
Tensile Stress (Yield)	5800	psi	ISO 527-2
Tensile Strain (Break)	240	%	ISO 527-2
Flexural Modulus	42100	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	6.7	ft·lb/in ²	ISO 179/1eA
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D)	72		ISO 868
Thermal	Nominal Value	Unit	Test Method
Melting Temperature (DSC)	424	°F	ISO 3146
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	9.0E+13	ohms	IEC 60093
Volume Resistivity	1.3E+16	ohms·cm	IEC 60093
Electric Strength (0.0787 in)	460	V/mil	IEC 60243-1

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	221	°F
Drying Time	3.0 to 5.0	hr
Suggested Max Moisture	< 0.10	%
Rear Temperature	428 to 446	°F
Middle Temperature	446 to 500	°F
Front Temperature	446 to 500	°F
Nozzle Temperature	446 to 500	°F



Processing (Melt) Temp	424 °F
Mold Temperature	68 to 122 °F
Injection Pressure	4270 to 14200 psi
Holding Pressure	711 to 5690 psi
Screw Speed	40 to 80 rpm

Injection Notes

Injection time: 2 to 10 sec

Holding pressure time: 10 to 30 sec

Notes

¹ Typical properties: these are not to be construed as specifications.

