LONGLITE® TPEE 1163LL

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

General Information

Product Description

1163LL is medium modulus grade with nominal Durometer hardness of 63D. It contains non-discolour stable antioxidants. It can be processed by thermoplastic processing techniques like injection molding and extrusion molding grade.

CHARACTERISTICS
1. Excellent medium modulus for injection and extrusion 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 • Creep Resistant	• Fatigue Resistant • Good Color Stability	• Good Flexibility • Low Shrinkage
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.23	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	30	g/10 min	ISO 1133
Molding Shrinkage	1.3	%	ISO 294-4
Water Absorption (24 hr, 73°F)	0.30	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	74100	psi	ISO 527-1
Tensile Stress (Yield)	4790	psi	ISO 527-2
Tensile Strain (Break)	490	%	ISO 527-2
Flexural Modulus	26500	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	No Break		ISO 179/1eA
Hardness	**Nominal Value**	**Unit**	**Test Method**
Shore Hardness (Shore D)	63		ISO 868
Thermal	**Nominal Value**	**Unit**	**Test Method**
Melting Temperature (DSC)	414	°F	ISO 3146
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	2.8E+15	ohms	IEC 60093
Volume Resistivity	6.3E+13	ohms·cm	IEC 60093
Electric Strength (0.0787 in)	440	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	410 to 446	°F
Middle Temperature	446 to 500	°F
Front Temperature	446 to 500	°F
Nozzle Temperature	446 to 500	°F

Processing (Melt) Temp	414	°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.