

SKYPEL® LP380A

SK Chemicals - Thermoplastic Polyester Elastomer

General Information

Product Description

SKYPEL LP380A is a thermoplastic polyester elastomer resin with 80A hardness based on shore A scale is widely used for injection molding and extrusion applications.

General

Forms	• Pellets
Processing Method	• Extrusion • Injection Molding

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.06		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	38	g/10 min	ASTM D1238
Molding Shrinkage - Flow	7.0E-3	in/in	ASTM D955
Water Absorption (24 hr)	0.90	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ²			ASTM D638
5.0% Strain, 0.0787 in, Injection Molded	114	psi	
10% Strain, 0.0787 in, Injection Molded	199	psi	
100% Strain, 0.0787 in, Injection Molded	526	psi	
Tensile Strength ² (Break, 0.0787 in, Injection Molded)	3840	psi	ASTM D638
Tensile Elongation ²			ASTM D638
Break, 0.0787 in, Injection Molded	1400	%	
Elastomers	Nominal Value	Unit	Test Method
Compression Set (158°F, 22 hr)	58	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	< 80		
Shore A, 15 sec	79		
Thermal	Nominal Value	Unit	Test Method
Peak Crystallization Temperature (DSC) ³	354	°F	ASTM D3418

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	374	°F
Middle Temperature	392	°F
Front Temperature	392	°F
Nozzle Temperature	401	°F
Mold Temperature	95	°F
Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	356	°F
Cylinder Zone 3 Temp.	374	°F
Cylinder Zone 5 Temp.	383	°F
Melt Temperature	392	°F
Die Temperature	383	°F