

SKYPEL

Engineering Thermoplastic Polyester Elastomer

Version: SK-181031
Date Updated: 2018-10-31

Technical Data Sheet

SKYPEL P155DF

DESCRIPTION

SKYPEL P155DF is a thermoplastic polyester elastomer resin superior heat resistance. SKYPEL P155DF with a medium 55D hardness based on shore D scale is widely used for injection molding and extrusion applications. And SKYPEL P155DF is also available to overmold TPU, PC, ABS, PC/ABS alloys.

Physical properties

Properties	ASTM No	Units	P155DF
Hardness (max)	D2240	Shore D	55
Specific gravity	D792	-	1.21
Water absorption, 24hr	D570	%	0.9
Mold shrinkage	D955	%	1.7
Tensile Stress at 5% Strain ¹⁾	D638	kgf/cm ²	90
Tensile Stress at 10% Strain ¹⁾	D638	kgf/cm ²	140
Tensile Stress at Break ¹⁾	D638	kgf/cm ²	300
Elongation at Break ¹⁾	D638	%	> 400
Flexural modulus ²⁾	D790	kgf/cm ²	2,000
Tear strength ³⁾	D1004	kN/m	130
Izod impact strength / notched ⁴⁾	D256	kgfcm/cm	N.B
Resilience ⁵⁾	D2632	%	54
Melting Point ⁶⁾	D3418	°C	217
Heat distortion temperature ⁷⁾	D648	°C	125
Melt Flow Rate Temperature, °C / 2.16kg	D1238	g/10min °C	22 230

- 1) ASTM Type IV dumbbells diecut from injection molded slab 2mm thick. Crosshead speed 50mm/min.
- 2) Crosshead speed 1.3mm/min.
- 3) Specimens 2mm thick. Crosshead speed 51mm/min.
- 4) Specimens 6.35mm thick. 'N.B.' means 'not broken'.
- 5) Vertical rebound.
- 6) Differential Scanning Calorimeter (DSC), peak of endotherm. Heating rate 10°C/min.
- 7) Load 4.6kg/cm²

General purpose processing condition

Injection	Cylinder	Rear	Center	Front	°C	225	235	235
	Nozzle	Mold				240	40	
Extrusion	Cylinder	Rear	Center	Front	°C	215	225	230
	Die	Melt				230	235	

All data reported here are believed to be correct. However, this should not be accepted as a guarantee of their accuracy.