

SKYPEL

Engineering Thermoplastic Polyester Elastomer

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Technical Data Sheet

SKYPEL P142DF

DESCRIPTION

SKYPEL P142DF is a thermoplastic polyester elastomer resin superior heat resistance. SKYPEL P142DF with a medium 42D hardness based on shore D scale is widely used for injection molding and extrusion applications. And SKYPEL P142DF is also available to overmold TPU, PC, ABS, PC/ABS alloys.

Physical properties

Properties	ASTM No	Units	P142DF
Hardness - 15s	D2240	Shore A	42 36
Specific gravity	D792	-	1.16
Water absorption, 24hr	D570	%	1.4
Mold shrinkage	D955	%	1.5
Tensile Stress at 5% Strain ¹⁾	D638	kgf/cm ²	14
Tensile Stress at 10% Strain ¹⁾	D638	kgf/cm ²	32
Tensile Stress at 100% Strain ¹⁾	D638	kgf/cm ²	100
Tensile Stress at Break ¹⁾	D638	kgf/cm ²	190
Elongation at Break ¹⁾	D638	%	820
Tear strength ²⁾	D1004	kN/m	75
Melting Point ³⁾	D3418	°C	218
Melt Flow Rate Temperature, °C / 2.16kg	D1238	g/10min °C	23 230

- 1) ASTM Type IV dumbbells diecut from injection molded slab 2mm thick. Crosshead speed 50mm/min
- 2) Specimens 2mm thick. Crosshead speed 51mm/min
- 3) Differential Scanning Calorimeter (DSC), peak of endotherm. Heating rate 10°C/min.

General purpose processing condition

Injection	Cylinder	Rear	°C	220	Extrusion	Cylinder	Rear	°C	205
		Center		225			Center		220
		Front		230			Front		220
	Nozzle			235		Die			220
	Mold			35		Melt			225

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