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	℃	220
	Center		225
	Front		230
	Nozzle		235
	Mold		35

Extrusion	Cylinder Rear	℃	205
	Center		220
	Front		220
	Die		220
	Melt		225