

SKYPEL P137DF

DESCRIPTION

SKYPEL P137DF is a thermoplastic polyester elastomer resin superior heat resistance. SKYPEL P137DF with a medium 35D hardness based on shore D scale is widely used for injection molding and extrusion applications. And SKYPEL P137DF is also available to overmold TPU, PC, ABS, PC/ABS alloys.

Physical properties

Properties	ASTM No	Units	P137DF
Hardness (max)	D2240	Shore D	35
Specific gravity	D792	-	1.14
Water absorption, 24hr	D570	%	1.5
Mold shrinkage	D955	%	1.3
Tensile Stress at 5% Strain ¹⁾	D638	kgf/cm ²	20
Tensile Stress at 10% Strain ¹⁾	D638	kgf/cm ²	42
Tensile Stress at Break ¹⁾	D638	kgf/cm ²	180
Elongation at Break ¹⁾	D638	%	> 400
Flexural modulus ²⁾	D790	kgf/cm ²	500
Tear strength ³⁾	D1004	kN/m	80
Izod impact strength / notched ⁴⁾	D256	kgfcm/cm	N.B
Resilience ⁵⁾	D2632	%	48
Melting Point ⁶⁾	D3418	°C	200
Heat distortion temperature ⁷⁾	D648	°C	50
Melt Flow Rate Temperature, °C / 2.16kg	D1238	g/10min °C	24 230

- 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	°C	205	Extrusion	Cylinder	Rear	°C	200
		Center		215			Center		
		Front		215		Front			215
	Nozzle			220		Die			215
	Mold			35		Melt			220

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