

## 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 <sup>1)</sup>	D638	kgf/cm <sup>2</sup>	14
Tensile Stress at 10% Strain <sup>1)</sup>	D638	kgf/cm <sup>2</sup>	32
Tensile Stress at 100% Strain <sup>1)</sup>	D638	kgf/cm <sup>2</sup>	100
Tensile Stress at Break <sup>1)</sup>	D638	kgf/cm <sup>2</sup>	190
Elongation at Break <sup>1)</sup>	D638	%	820
Tear strength <sup>2)</sup>	D1004	kN/m	75
Melting Point <sup>3)</sup>	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