SKYPEL P128DF

Technical Data Sheet

DESCRIPTION

SKYPEL P128DF is a thermoplastic polyester elastomer resin superior heat resistance. SKYPEL P128DF with a medium 28D hardness based on shore D scale is widely used for injection molding and extrusion applications. And SKYPEL P128DF is also available to overmold TPU, PC, ABS, PC/ABS alloys.

Physical properties

Properties	ASTM No	Units	P128DF
Hardness	D2240	Shore D	28
Specific Gravity	D792	-	1.14
Water Absorption, 24hr	D570	%	1.8
Mold Shrinkage	D955	%	1.3
Tensile Stress at 5% Strain [1)]	D638	kgf/cm^2	8
Tensile Stress at 10% Strain [1)]	D638	kgf/cm^2	22
Tensile Stress at Break [1)]	D638	kgf/cm^2	140
Elongation at Break [1)]	D638	%	370
Flexural Modulus [2)]	D790	kgf/cm^2	300
Tear Strength [3)]	D1004	kN/m	70
Izod Impact Strength / Notched [4)]	D256	kg·cm/cm	N.B.
Resilience [5)]	D2632	%	55
Melting Point [6)]	D3418	°C	196
Heat Distortion Temperature [7)]	D648	°C	45
Melt Flow Rate	D1238	g/10min	33
- Temperature, °C / 2.16kg		°C	230
Volume Resistivity	D257	Ω−cm	$6x10^{14}$
Surface Resistivity	D257	Ω	$8x10^{13}$
Dissipation Factor at 10^6Hz	D150	-	0.028

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 $4.6kg/cm^2$.

OUTSTANDING CHARACTERISTICS AND PROPERTIES

SKYPEL P128DF offers enhanced performance upon high thermal stability and flexural modulus. Outstanding characteristics of SKYPEL P128DF are listed below.

1. Excellent mechanical properties such as high tensile strength and strain at break
2. High resistance to creep, impact, and flex-fatigue
3. Excellent flexibility at low temperature
4. Fast crystallization to reduce the cycle time of injection process

PROCESSING

SKYPEL P128DF should be sufficiently dried prior to processing. For effective drying using dehumidifying dryer, it should be held for 2 to 3 hours at 100 ℃ or overnight at least 70 ℃. Pre-dried SKYPEL P128DF in aluminum bag is also available for your convenience upon your choice.

General purpose processing condition

Process condition				P128DF
Injection	Cylinder	Rear Center Front	℃	190 200 200
	Nozzle		℃	205
	Mold		℃	30
Extrusion	Cylinder	Rear Center Front	℃	195 210 210
	Die		℃	210
	Melt		℃	215