

PROPERTIES OF SKYPEL

	ASTM No.	Units	Basic Grades				
			G163D	G168D	G172D	G175D	G182D
Hardness	D2240	Shore D	63	68	72	75	80
Specific Gravity	D792	-	1.21	1.24	1.25	1.27	1.27
Water Absorption, 24hr	D570	%	0.3	0.3	0.3	0.3	0.2
Mold Shrinkage	D955	%	1.5	1.6	1.7	2.0	2.2
Tensile Stress at 5% Strain ¹⁾	D638	kg/cm ²	110	150	230	260	300
Tensile Stress at 10% Strain ¹⁾	D638	kg/cm ²	175	240	300	360	400
Tensile Strength at Break ¹⁾	D638	kg/cm ²	440	460	470	490	500
Elongation at Break ¹⁾	D638	%	500	450	420	380	350
Flexural Modulus ²⁾	D790	kg/cm ²	3200	4700	5500	7800	9000
Tear Strength ³⁾	D1004	kN/m	180	193	205	230	260
Izod Impact Strength / Notched ⁴⁾	D256	kg-cm/cm	N.B.	23	12	4	4
Resilience ⁵⁾	D2632	%	53	47	-	-	-
Melting Point ⁶⁾	D3418	°C	212	215	218	220	222
Heat Distortion Temperature ⁷⁾	D648	°C	130	140	150	154	156
Melt Flow Rate	D1238	g/10min	10	13	13	10	8
Temperature, °C / 2.16kg Load			230	230	230	230	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 'No Break'.
- 5) Vertical rebound.
- 6) Differential Scanning Calorimeter (DSC), peak of endotherm. Heating rate 10°C/min.
- 7) Load 4.6kg/cm².

PROCESSING CONDITIONS OF SKYPEL

INJECTION MOLDING	Cylinder	Rear	215	220	220	225	225
		Center	225	230	230	235	235
		Front	230	230	230	235	235
	Nozzle		235	235	235	240	240
	Mold		40	40	40	40	40
EXTRUSION	Cylinder	Rear	205	210	210	215	215
		Center	215	215	220	225	225
		Front	220	220	225	230	230
	Die		220	225	225	230	230
	Melt		225	230	230	235	235

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