

PPS Data Sheet 물성표

HIGH PERFORMANCE MATERIAL



	Product Description	Unit	Test Method	PPS Natural	PPS GF40	PPS ESD
Mechanical properties	Tensile strength - 인장강도	Mpa	D638	79	167	94
	Tensile elongation - 연신율	%	D638	23	2	6
	Bending strength - 굴곡강도	Mpa	D790	128	235	146
	Elastic modulus - 탄성계수	Gpa	D790	3.3	11.8	5.2
	Poisson's ratio - 프아송비	-	-	0.37	0.4	-
	Compressive strength - 압축강도	Mpa	D695	-	-	-
	Izod impact (notched) - 충격강도	J/m	D256	15	157	43
	Rockwell hardness - 록웰경도	-	D785	-	M80	-
Physical properties	Specific gravity (23°C) - 비중	-	D792	1.35	1.59	1.34
	Water absorption rate - 물흡수율 (23°C, 24 hrs)	%	D570	0.02	0.02	-
	Linear expansion coefficient - 열팽창계수	$\times 10^{-5}/^{\circ}\text{C}$	JIS K7197	2.4-2.9	1.7-6.8	-
	Thermal conductivity coefficient - 열전도도	W /mk	E1530	0.2	-	-
	Flammability(UL) - 가연성	-	D570	V-0	V-2	V-0
Thermal properties	Heat distortion temperature (1.82Mpa) - 열변형온도	$^{\circ}\text{C}$	D648	112	260	168
	Continuous use temperature - 연속사용온도	$^{\circ}\text{C}$	-	220	220	-
	Glass transition temperature - 유리전이온도	$^{\circ}\text{C}$	-	88	-	88
	Melting point - 녹는점	$^{\circ}\text{C}$	-	278	-	278
Electrical properties	Dielectric strength - 절연파괴강도	MV/m	D149	15	18	-
	Surface resistance - 표면저항	Ω	D257	10^{16}	10^{16}	10^6-10^{10}
	Volume resistance - 체적 저항	$\Omega \cdot \text{cm}$	D257	10^{18}	10^{16}	-
	Dielectric constant 10^6 Hz - 유전율	-	D150	3.6	4.1	-
	Dielectric loss factor 10^6 Hz - 유전손실율	-	D150	0.0011	0.003	-
Acquisition of Food Sanitation Law - 식품분야 사용 가능 여부				O	-	-