

PS(Polystyrene) & HIPS(High Impact Polystyrene)



Grade Table

				GPPS					HIPS	
				GP125	GP125EI	GP125EB	GP150	GP150K	HI425E	
				General purpose	Excellent demoldability	High strength	Heat resistance High rigidity	Super high strength	High strength Extrusion	
Properties	unit	Test method	Test condition							
Tensile Strength	psi	D638	G 5mm/min							
		D638	H 50mm/min	6532	6532	7100	7526	7668	4260	
Elongation	%	D790	G 5mm/min	2	2	3	2.5	3.5	40	
			H 50mm/min							
Flexural Strength	psi	D790	23°C	8236	8236	10224	12212	12638	4970	
Rockwell Hardness		D785	G M scale / H L scale	74	74	74	75	75	65	
IZOD impact strength	kg-cm/cm	D256	3.2mm, Notouched,23°C	1.5	1.5	1.5	1.5	1.5	9.5	
Heat distortion T	°C	D648	18.6kg/cm(264psi)unannealed	83	82	85	90	92	80	
Vicat softening T	°C	D1525		99	99	102	105	105	97	
Melt flow index		D1238	200°C, 5kg	9	9.5	6.5	4.5	3	4.5	
Molding shrinkage	%	D955		0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	0.3-0.6	
Specific gravity		D792		1.04	1.04	1.04	1.04	1.04	1.04	
Water absorption		D570	24hr, Immersion water	0.03	0.03	0.03	0.03	0.03	0.05	
Flammability		UL*	1/16"(1.6mm)	HB	HB	HB	HB	HB	HB	