

High Impact Polystyrene, POLYREX[®] Characteristics

April 27, 2012

Properties	Test Method	Test Condition	Unit	PH-55Y	PH-60	PH-88	PH-888H	PH-888G	PH-88S
Tensile Strength	ASTM D638	3mm, 6mm/min	Kg/cm ²	220	290	240	300	320	260
Tensile Elongation	ASTM D638	3mm, 6mm/min	%	50	40	40	45	30	55
Flexural Strength	ASTM D790	6mm, 2.8 mm/min	Kg/cm ²	450	430	380	450	470	360
Flexural Modulus	ASTM D790	6mm, 2.8 mm/min	Kg/cm ²	23000	22000	20000	20000	21000	19000
Izod Impact Strength	ASTM D256 (Notched)	6mm, 23°C	Kg-cm/cm	6.5	7.5	8.5	9	8.5	11
		3mm, 23°C		7.5	8.5	10	10.5	9.5	15
Melt Flow Index	ASTM D1238	200°C, 5Kg	g/10min	9	5.5	6	3.8	4	2.6
		220°C, 10Kg		26	16	16	10.8	11	8.5
Hardness	ASTM D785	-	L Scale	70	75	60	63	65	50
Specific Gravity	ASTM D792	23°C	-	1.05	1.05	1.05	1.05	1.05	1.05
Vicat Softening Temp.	ASTM D1525	3mm, 50°C/hr	°C	95	100	98	102	102	100
Heat Distortion Temp.	ASTM D648	Annealed	°C	89	96	94	97	97	94
		Unannealed		78	81	80	82	82	80
Flammability	UL 94	-	-	1.6mm, HB	1.6mm, HB	1.6mm, HB	1.6mm, HB	1.6mm, HB	1.6mm, HB

Notes : These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests

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