

# IF850 (Good Flow Grade)



Properties	Test Method	Condition	Unit	Value
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## Physical Properties

Specific Gravity	ASTM D792	-	-	1.18
Total Light Transmittance	ASTM D1003	3.2mm	%	93
Refractive Index	ASTM D542	nd	-	1.49
HAZE	ASTM D1003	3.2mm	%	0.5
Water Absorption	ASTM D570	24h	%	0.3

## Thermal Properties

Flow Index	ASTM D1238	3.8Kg,230°C	g/10min	12.3
VICAT Softening Point	ASTM D1525	1 kg	°F	212
			°C	99.9
Coefficient of Linear Expansion	ASTM D696	-	mm/mm/°C	6 X 10 <sup>-5</sup>
Molding Shrinkage	ASTM D955	-	%	0.4 ~ 0.8
HDT	ASTM D648	Unannealed	°F	178
			°C	80.9
HDT	ASTM D648	18.6kg Annealed	°F	194
			°C	89.9

## Mechanical Properties

Izod Impact Strength	ASTM D256	Notched	J/m	14.7
			KJ/m <sup>2</sup>	1.5
			ft.lb/cm	0.28
			kg cm/cm	1.5
Rockwell Hardness	ASTM D785	M Scale	-	90
Tensile Strength	ASTM D638	-	psi	10,085
		-	M Pa	70
		-	kg/cm <sup>2</sup>	710
Elongation	ASTM D638	-	%	13
Flexural Strength	ASTM D790	-	psi	18,608
		-	M Pa	128
		-	kg/cm <sup>2</sup>	1,310
Flexural Modulus	ASTM D790	-	psi	478,693
		-	M Pa	3,304
		-	kg/cm <sup>2</sup>	33,700

## Electrical Properties

Volume Resistance	ASTM D257	-	Ω·cm	> 10
Dielectric Strength	ASTM D149	4KV/S	kV/mm	20
Dielectric Constant	ASTM D150	60Hz	-	4
Power Factor	ASTM D150	60Hz	-	0.05

## Flame Retardant Properties

Flame Retardancy	UL 94	-	class ( thickness:mm )	HB
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REMARKS : The listed values should be used for referential purposed only