

HiDura™ PTR 833F

copolyamide 66/6

HiDura PTR 833F is a polyamide copolymer that features high strength, flexibility, toughness, and slow crystallization. It offers melt viscosity and crystallization rate suitable for cast film, mono- and biaxially oriented film, and some blown film applications.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Lubricant		
Features	• Chemical Resistant • High Melt Stability • High Toughness • Puncture Resistant	• High Elongation • High Melt Strength • High Viscosity	• High Impact Resistance • High Strength • Lubricated
Agency Rating	• ASTM, D4066 PA1100B4311	• ASTM, D6779 PA0810B4311	• ISO, 1043 PA66/6
Appearance	• Natural Color		
Forms	• Pellets		

Physical

	dry	cond.	Unit	Test Standard
Density	1.12	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.4	*	%	
Flow : 23°C, 2.00 mm	1.4	*	%	
Water Absorption				ISO 62
23°C, 24 hr	3.2	*	%	
Equilibrium, 23°C, 50% RH	2.7	*	%	
Water Absorption, Saturation, 23°C	11		%	ISO 62
Relative Viscosity, Sulphuric Acid	3.3		-	ISO 307
Moisture Content	≤ 0.1		%	ASTM D 6869

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	2300	627	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	70	64	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	212	386	%	ISO 527-2
Flexural Modulus (23°C)	2400	476	MPa	ISO 178
Flexural Strength (23°C)	74	14	MPa	ISO 178

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Impact	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	3.8	42	kJ/m ²	
-30°C	3.3	2.6	kJ/m ²	
-40°C	3.2	2.7	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	N	164	kJ/m ²	
-30°C	N	179	kJ/m ²	
-40°C	N	178	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	4.3	17	kJ/m ²	
-30°C	4	4.8	kJ/m ²	
-40°C	4.2	5.8	kJ/m ²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	47	71	°C	
0.45 MPa, Unannealed	69	120	°C	
Melting Temperature	227	*	°C	ISO 11357-3

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	28	28	kV/mm	IEC 60243

Extrusion	Value	Unit
Cylinder Zone 1 Temp	245 - 265	°C
Cylinder Zone 2 Temp	245 - 265	°C
Cylinder Zone 3 Temp	240 - 260	°C
Cylinder Zone 4 Temp	230 - 255	°C
Cylinder Zone 5 Temp	225 - 250	°C
Melt temperature	245 - 265	°C
Die temperature	245 - 265	°C