

HiDura™ D2X NT

polyamide 612

HiDura D2X NT is a medium-high viscosity PA612 grade. It is suitable for monofilament, film and profile extrusion applications. It exhibits low moisture absorption, good chemical resistance, dimensional stability and high impact resilience. PA612 offers a unique balance of thermal, mechanical and physical properties.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Features	• Abrasion Resistance	• Chemical Resistant	• Medium-High Viscosity
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Casting • Other Extrusion	• Film Extrusion • Profile Extrusion	• Injection Molding • Sheet Extrusion

Physical

	dry	cond.	Unit	Test Standard
Density	1.06	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	1.9	*	%	
Flow : 23°C, 2.00 mm	1.7	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.39	*	%	
Equilibrium, 23°C, 50% RH	1.3	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	2200	1400	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	62	61	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	170	280	%	ISO 527-2
Flexural Modulus (23°C)	2100	1500	MPa	ISO 178
Flexural Strength (23°C)	71	39	MPa	ISO 178

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	4.4	9.1	kJ/m ²	
-30°C	3.4	5.8	kJ/m ²	
-40°C	3.6	6.6	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
+23°C	N	N	kJ/m ²	
-30°C	N	N	kJ/m ²	
-40°C	N	N	kJ/m ²	
Notched Izod Impact Strength				ISO 180/1A
+23°C	4	5.7	kJ/m ²	

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-30°C	4.2	7.1	kJ/m²
-40°C	4.3	4.7	kJ/m²

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	51	-	°C	
0.45 MPa, Unannealed	125	127	°C	
Melting Temperature	218	*	°C	ISO 11357-3

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	32	-	kV/mm	IEC 60243

Injection	Value	Unit
Drying Temperature	80	°C
Drying Time	4 - 6	h
Suggested Max Moisture	0.15	%
Processing (Melt) Temperature	230 - 290	°C
Mold Temperature	50 - 100	°C

Extrusion	Value	Unit
Melt temperature	235 - 260	°C

