HiDura™ S1X NT

PA610 Ascend

Product Texts

HiDura S1X NT is a low-medium viscosity PA610 grade with 62% bio-based content. It is suitable for monofilament, film, and general purpose injection molding applications. PA610 offers a unique balance of thermal, mechanical, and physical properties.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Molding shrinkage, parallel	**1.8 / ***	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.6 / ***	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2000 / 1100**	MPa	ISO 527
[C] Yield stress	**59 / 44**	MPa	ISO 527
[C] Yield strain	**4.9 / 24**	%	ISO 527
[C] Charpy impact strength, +23°C	**N / N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**N / N**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**5.7 / 12**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**6.5 / 7.4**	kJ/m²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**225 / ***	°C	ISO 11357-1/-3
[C] Temp. of deflection under load, 1.80 MPa	**45 / ***	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**144 / ***	°C	ISO 75-1/-2
[C] Coeff. of linear therm. expansion, parallel	**100 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**105 / ***	E-6/K	ISO 11359-1/-2

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Electric strength	**32 / 31**	kV/mm	IEC 60243-1

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**0.5 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**1.5 / ***	%	Sim. to ISO 62
[C] Density	**1080 / -**	kg/m³	ISO 1183
Biobased content	**62**	%	-

[C]: CAMPUS

Characteristics

Processing

Injection Molding, Profile Extrusion, Sheet Extrusion, Other Extrusion, Casting

Delivery form

Pellets, Natural Color

Certifications

Contains renewable resources

Applications

General Purpose, Monofilament

Regional Availability

North America, Europe, Asia Pacific