

HiDura™ LUX H3X NT0853

Ascend Performance Materials Operations LLC - *Polyamide 6I/6T Copolymer*

General Information

Product Description

HiDura LUX H3X NT0853 is a polyamide 6I/6T copolymer grade. It can be used for film applications to enhance processability, shrink, and thermoforming characteristics.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	
	• Europe	• North America	
Features	• Chemical Resistant	• High Melt Strength	
	• Copolymer	• High Viscosity	
Agency Ratings	• ASTM D4066 PA0000B6405	• ASTM D4066 PA0000B6405	• ISO 1043 PA6I6T
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Blow Molding	• Film Extrusion	• Thermoforming
Resin ID	• Specialty Polymer		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.18	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	0.60	--	%	
Flow : 73°F, 0.0787 in	0.60	--	%	
Water Absorption (24 hr, 73°F)	0.70	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.0	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	435000	406000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	14400	13800	psi	ISO 527-2
Tensile Stress (Break, 73°F)	11000	7250	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	8.4	5.5	%	ISO 527-2
Tensile Strain (Break, 73°F)	> 50	> 50	%	ISO 527-2
Flexural Modulus (73°F)	450000	450000	psi	ISO 178
Flexural Stress (73°F)	14200	14200	psi	ISO 178
Poisson's Ratio (73°F)	0.38	--		ISO 527-2
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	248	199	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	230	183	°F	ISO 75-2/A
CLTE - Flow (73 to 131°F, 0.0787 in)	3.8E-5	--	in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F, 0.0787 in)	3.8E-5	--	in/in/°F	ISO 11359-2
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	660	640	V/mil	IEC 60243-1

Processing Information

Extrusion	Dry Unit
Cylinder Zone 1 Temp.	428 to 464 °F
Cylinder Zone 2 Temp.	464 to 518 °F
Cylinder Zone 3 Temp.	464 to 518 °F
Cylinder Zone 4 Temp.	464 to 518 °F
Cylinder Zone 5 Temp.	464 to 518 °F
Melt Temperature	464 to 518 °F
Die Temperature	482 to 527 °F

