

HiDura™ ThermaPlus 24XLR8 NT0823

polyamide 66



HiDura ThermaPlus 24XLR8 NT0823 is a heat stabilized PA66 product designed for injection molding applications that is designed to maintain mechanical properties after extended exposure to temperatures up to 160 C.

General

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Heat Stabilizer	• Lubricant	
Features	• Balanced Stiffness/Toughness • Fast Molding Cycle • Good Mold Release • High Heat Resistance • Oil Resistant	• Chemical Resistant • Gasoline Resistant • Good Toughness • High Tensile Strength • Solvent Resistant	• Excellent Processability • Good Flow • High Elongation • Lubricated
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.14	-	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	1.8	*	%	
Water Absorption				ISO 62
23°C, 24 hr	1.9	*	%	
Equilibrium, 23°C, 50% RH	2.5	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	2600	1000	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	78	68	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	50	>50	%	ISO 527-2
Flexural Modulus (23°C)	2800	900	MPa	ISO 178
Flexural Strength (23°C)	86	22	MPa	ISO 178
Poisson's Ratio (23°C)	0.3		-	ISO 527-2

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	6.6	26	kJ/m ²	
-30°C	6.5	7.4	kJ/m ²	
-40°C	5.1	5.2	kJ/m ²	

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Charpy Unnotched Impact Strength

ISO 179/1eU

+23°C	N	N	kJ/m²
-30°C	N	N	kJ/m²
-40°C	N	N	kJ/m²

Notched Izod Impact Strength

ISO 180/1A

+23°C	5.5	18	kJ/m²
-30°C	6.1	7.9	kJ/m²
-40°C	6.2	4.7	kJ/m²

Thermal

dry

cond.

Unit

Test Standard

Heat Deflection Temperature

ISO 75-2/A

1.80 MPa, Unannealed	61	-	°C
0.45 MPa, Unannealed	186	-	°C

Melting Temperature

260

*

°C

ISO 11357-3

CLTE

ISO 11359-2

Flow : 23 to 55°C, 2.00 mm	102	*	E-6/K
Transverse : 23 to 55°C, 2.00 mm	124	*	E-6/K

Electrical

dry

cond.

Unit

Test Standard

Dielectric Strength (1.00 mm)

29

27

kV/mm

IEC 60243

Injection

Value

Unit

Drying Temperature

≤ 70

°C

Drying Time

1 - 3

h

Rear Temperature

260 - 280

°C

Middle Temperature

270 - 285

°C

Front Temperature

280 - 290

°C

Nozzle temperature

280 - 300

°C

Processing (Melt) Temperature

285 - 300

°C

Mold Temperature

65 - 95

°C

HiDURA™