

HiDura™ DOM NT0821

 Ascend Performance Materials Operations LLC - *Polyamide 612*
General Information
Product Description

HiDura DOM NT0821 is a low viscosity, lubricated PA612 molding grade. It exhibits excellent flow and release making it suitable for injection molding of thin parts. It exhibits low moisture absorption, good chemical resistance and dimensional stability. PA612 offers a unique balance of thermal, mechanical and physical properties.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Features	• Chemical Resistant • Good Dimensional Stability • High Flow
Appearance	• Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID	• PA612

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.06	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	2.0	--	%	
Flow : 73°F, 0.0787 in	2.2	--	%	
Water Absorption (24 hr, 73°F)	0.40	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	334000	247000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	9430	7980	psi	ISO 527-2
Tensile Stress (Break, 73°F)	5800	5370	psi	ISO 527-2
Tensile Strain (Break, 73°F)	31	81	%	ISO 527-2
Flexural Modulus (73°F)	363000	247000	psi	ISO 178
Flexural Stress (73°F)	10600	6380	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	1.7	1.5	ft·lb/in ²	
-22°F	1.9	1.7	ft·lb/in ²	
73°F	2.0	2.9	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-40°F	No Break	No Break		
-22°F	No Break	No Break		
73°F	No Break	No Break		
Notched Izod Impact Strength				ISO 180/1A
-40°F	1.9	1.9	ft·lb/in ²	
-22°F	1.8	1.8	ft·lb/in ²	
73°F	1.9	2.2	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	295	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	147	--	°F	ISO 75-2/A
Melting Temperature	424	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	1000	740	V/mil	IEC 60243-1

