

**HiDura™ DOMP NT0805**

Ascend Performance Materials Operations LLC - Polyamide 612

**General Information**
**Product Description**

HiDura DOMP NT0805 is a nucleated, lubricated and low viscosity PA612 molding grade. It exhibits excellent flow, crystallization rate and release making it suitable for injection molding of thin parts (i.e. cable ties, battery seals, etc). 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
Additive	• Lubricant		
Features	• Abrasion Resistant • Chemical Resistant • Excellent Processability • Fast Molding Cycle	• Good Dimensional Stability • Good Flow • Good Mold Release • High Flow	• Low Viscosity • Lubricated
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA612		

**Properties <sup>1</sup>**

Physical	Dry	Conditioned	Unit	Test Method
Density	1.07	--	g/cm <sup>3</sup>	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)	0.37	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.3	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	348000	261000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	9570	8270	psi	ISO 527-2
Tensile Strain (Break, 73°F)	21	62	%	ISO 527-2
Flexural Modulus (73°F)	334000	247000	psi	ISO 178
Flexural Stress (73°F)	10200	6380	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	1.3	1.4	ft·lb/in <sup>2</sup>	
-22°F	1.4	1.7	ft·lb/in <sup>2</sup>	
73°F	1.5	2.2	ft·lb/in <sup>2</sup>	
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	1.7	2.1	ft·lb/in <sup>2</sup>	
-22°F	1.6	2.1	ft·lb/in <sup>2</sup>	
73°F	1.6	2.2	ft·lb/in <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	304	298	°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
<b>Electrical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Electric Strength (0.0394 in)	760	790	V/mil	IEC 60243-1

### Processing Information

<b>Injection</b>	<b>Dry</b>	<b>Unit</b>
Drying Temperature	176	°F
Drying Time	4.0 to 6.0	hr
Suggested Max Moisture	0.15	%
Processing (Melt) Temp	455 to 554	°F
Mold Temperature	122 to 194	°F

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

