

HiDura™ D0MW BK0804

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

HiDura D0MW BK0804 is a weatherable, lubricated, low viscosity PA612 molding grade. It exhibits excellent flow and release making it suitable for injection molding of thin parts (e.g. cable ties). It exhibits low moisture absorption, good chemical resistance, dimensional stability and weather resistance making it ideal for outdoor applications. 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	• Good Dimensional Stability	• High Flow
	• Chemical Resistant	• Good Flow	• Low Viscosity
	• Excellent Processability	• Good Mold Release	• Lubricated
	• Fast Molding Cycle	• Good Weather Resistance	
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		
Resin ID	• PA612		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.08	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 73°F, 0.0787 in	2.1	--	%	
Flow : 73°F, 0.0787 in	2.2	--	%	
Water Absorption (24 hr, 73°F)	0.39	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.3	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (73°F)	334000	232000	psi	ISO 527-1
Tensile Stress (Yield, 73°F)	9140	7400	psi	ISO 527-2
Tensile Stress (Break, 73°F)	7250	4930	psi	ISO 527-2
Tensile Strain (Yield, 73°F)	9.6	14	%	ISO 527-2
Tensile Strain (Break, 73°F)	19	47	%	ISO 527-2
Flexural Modulus (73°F)	348000	247000	psi	ISO 178
Flexural Stress (73°F)	10300	6530	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-40°F	1.6	2.2	ft·lb/in ²	
-22°F	1.7	2.8	ft·lb/in ²	
73°F	2.4	4.8	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	2.6	ft·lb/in ²	
-22°F	2.0	2.7	ft·lb/in ²	
73°F	2.3	4.1	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method



Deflection Temperature Under Load (66 psi, Unannealed)	311	309	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	158	--	°F	ISO 75-2/A
Melting Temperature	424	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength (0.0394 in)	970	--	V/mil	IEC 60243-1

Processing Information

Injection	Dry Unit
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

¹ Typical properties: these are not to be construed as specifications.

