

HiDura™ DOMW BK0804

polyamide 612



HiDura DOMW 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

Regional Availability	• North America	• Europe	• Asia Pacific
Additive	• Lubricant		
Features	• Abrasion Resistance • Fast Molding Cycle • Good Mold Release • Lubricated	• Chemical Resistant • Good Dimensional Stability • High Flow • Weatherable	• Excellent Processability • Good Flow • Low Viscosity
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Physical

	dry	cond.	Unit	Test Standard
Density	1.08	-	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow : 23°C, 2.00 mm	2.1	*	%	
Flow : 23°C, 2.00 mm	2.2	*	%	
Water Absorption				ISO 62
23°C, 24 hr	0.39	*	%	
Equilibrium, 23°C, 50% RH	1.3	*	%	

Mechanical

	dry	cond.	Unit	Test Standard
Tensile Modulus (23°C)	2300	1600	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	63	51	MPa	ISO 527-2
Tensile Stress (Break, 23°C)	50	34	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	9.6	14	%	ISO 527-2
Tensile Strain (Break, 23°C)	19	47	%	ISO 527-2
Flexural Modulus (23°C)	2400	1700	MPa	ISO 178
Flexural Strength (23°C)	71	45	MPa	ISO 178

Impact

	dry	cond.	Unit	Test Standard
Charpy Notched Impact Strength				ISO 179/1eA
+23°C	5	10	kJ/m ²	
-30°C	3.5	5.9	kJ/m ²	
-40°C	3.4	4.7	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	4.9	8.6	kJ/m²	
-30°C	4.3	5.6	kJ/m²	
-40°C	4	5.5	kJ/m²	

Thermal	dry	cond.	Unit	Test Standard
Heat Deflection Temperature				ISO 75-2/A
1.80 MPa, Unannealed	70	-	°C	
0.45 MPa, Unannealed	155	154	°C	
Melting Temperature	218	*	°C	ISO 11357-3

Electrical	dry	cond.	Unit	Test Standard
Dielectric Strength (1.00 mm)	38	-	kV/mm	IEC 60243

Injection	Value	Unit
Drying Temperature	80	°C
Drying Time	4 - 6	h
Suggested Max Moisture	0.15	%
Processing (Melt) Temperature	235 - 290	°C
Mold Temperature	50 - 90	°C

HiDURA™