

## Technical Data

Product Description				
(DOMAMID 6G50H)				
Polyamide 6, 50% glass fiber reinforced, heat stabilized, for injection moulding				
General				
Material Status	• Commercial: Active			
Literature <sup>1</sup>	<ul style="list-style-type: none"> <li>• Brochure - DOMO ENGINEERING PLASTICS: In Chemicals We Trust. (English)</li> <li>• Brochure - PRODUCTS LIST: DOMAMID &amp; ECONAMID (English)</li> <li>• Technical Datasheet (English)</li> </ul>			
Search for UL Yellow Card	<ul style="list-style-type: none"> <li>• DOMO Engineering Plastics</li> <li>• DOMAMID®</li> </ul>			
Availability	• Asia Pacific	• Europe	• North America	
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight			
Additive	• Heat Stabilizer			
Features	• Heat Stabilized			
Processing Method	• Injection Molding			
Resin ID (ISO 1043)	• PA6-GF50			
Physical	Dry	Conditioned	Unit	Test Method
Density	1.56	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>3</sup>				ISO 2577
Across Flow : 23°C, 72 hr	0.40 to 0.60	--	%	
Flow : 23°C, 72 hr	0.10 to 0.30	--	%	
Water Absorption (Saturation, 23°C)	5.0	--	%	ISO 62
Viscosity Number				ISO 307
96% H2SO4 (Sulphuric Acid)	145	--	cm <sup>3</sup> /g	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	16000	10500	MPa	ISO 527-2/1
Tensile Stress (Break)	225	145	MPa	ISO 527-2/5
Tensile Strain (Break)	2.5	4.0	%	ISO 527-2/5
Flexural Modulus <sup>4</sup>	14500	9000	MPa	ISO 178
Flexural Stress <sup>4</sup>	325	205	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (23°C)	20	25	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	100	110	kJ/m <sup>2</sup>	ISO 179/1eU
Notched Izod Impact Strength (23°C)	19	25	kJ/m <sup>2</sup>	ISO 180/1A
Unnotched Izod Impact Strength (23°C)	95	100	kJ/m <sup>2</sup>	ISO 180/1U
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	220	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	210	--	°C	ISO 75-2/A
Vicat Softening Temperature	215	--	°C	ISO 306/B50
Melting Temperature	221	--	°C	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+13	--	ohms	IEC 60093
Volume Resistivity	1.0E+15	--	ohms·cm	IEC 60093
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate	< 100	--	mm/min	FMVSS 302
Flame Rating (0.8 mm)	HB	--		UL 94
Additional Information	Dry	Conditioned	Unit	Test Method
ISO Shortname	PA6,MH,14-160,GF50	--		ISO 1874



Injection	Dry Unit
Drying Temperature	75 to 85 °C
Drying Time	2.0 to 4.0 hr
Processing (Melt) Temp	260 to 280 °C
Mold Temperature	90 to 100 °C

**Notes**

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> 50% RH

<sup>4</sup> 2.0 mm/min

