

Domamid A1-509-I1-N

Polyamide 6, impact modified, natural

Properties	Unit	Test method	Value	
General Properties				
Density	g/cm ³	ISO 1183/A	1.09	
Ash content (650°C)	%	ISO 3451	-	
Viscosity number (sulfuric acid)	cm ³ /g	ISO 307	-	
Melt Volume Flow Rate - MVR (275°C/ 5 kg)	cm ³ /10 min	ISO 1133	160	
Moisture absorption (23°C/50% RH, 24 h)	%	ISO R 62	-	
Water absorption (23°C, 24 h in water)	%	ISO R 62	-	
Moulding shrinkage (between 16-72 hrs, 23°C, 50% RH)				
length	%	ISO 2577	1.45	
width	%	ISO 2577	1.50	
Mechanical properties (Dry as Molded)				
Tensile modulus of elasticity (v = 1mm/min)	MPa	ISO 527-1A	2600	
Tensile yield stress (v = 5 mm/min)	MPa	ISO 527-1A	65	
Tensile yield strain (v = 5 mm/min)	%	ISO 527-1A	3.6	
Tensile stress at break (v = 5 mm/min)	MPa	ISO 527-1A	-	
Tensile strain at break (v = 5 mm/min)	%	ISO 527-1A	-	
Charpy impact strength notched	+ 23°C	kJ/m ²	ISO 179/1eA	20
	- 30°C	kJ/m ²	ISO 179/1eA	-
Charpy impact strength unnotched	+ 23°C	kJ/m ²	ISO 179/1eU	N
	- 30°C	kJ/m ²	ISO 179/1eU	-
Ball indentation hardness		N/mm ²	ISO 2039-1	-
Thermal properties				
Melting point, DSC	°C	ISO 11357-1	221	
Heat deflection temperature:				
- HDT/A (1.8 MPa)	°C	ISO 75-2		
- HDT/B (0.45 MPa)	°C	ISO 75-2		
Vicat softening temperature:				
- VST/A/50 (10N)	°C	ISO 306		
- VST/B/50 (50N)	°C	ISO 306		
Burning Behaviour				
Burning rate (FMVSS302) 2mm	mm/min	ISO 3795		
Glow wire temperature 2mm	°C	VDE 0471-2		
Glow wire temperature 3 mm	°C	VDE 0471-2		
Flammability UL 94, thickness 1.5 mm		UL 94		
Flammability UL 94, thickness 3.0 mm		UL 94		
Electrical properties				
Volume resistivity	Ohm.cm	VDE 0303-3		
Surface resistivity	Ohm	VDE 0303-3		

For more information:

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