



Americas: COMMERCIAL

PA 66, Aramid, PTFE, Low Warpage

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 5 mm/min	81	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	81	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	8.2	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	8.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	3710	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	3270	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	79	MPa	ISO 527
Tensile Stress, break, 5 mm/min	79	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	8.9	%	ISO 527
Tensile Strain, break, 5 mm/min	8.9	%	ISO 527
Tensile Modulus, 1 mm/min	3620	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	102	MPa	ISO 178
Flexural Modulus, 2 mm/min	3320	MPa	ISO 178
ІМРАСТ	Value	Unit	Standard
Izod Impact, unnotched, 23°C	524	J/m	ASTM D 4812
Izod Impact, notched, 23°C	44	J/m	ASTM D 256
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	37	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	249	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	144	°C	ASTM D 648
CTE, -40°C to 40°C, flow	6.67E+01	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.62E+01	1/°C	ASTM E 831
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	235	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	116	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.21	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.73	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	1 - 3	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	1 - 3	%	ASTM D 955
Wear Factor Washer	17	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Wear Factor Ring	0 - 0	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.41	-	ASTM D 3702 Modified
Static COF	0.35	-	ASTM D 3702 Modified
Density	1.21	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	1.1	%	ISO 62

Processing

Source GMD, last updated:02/07/2008

Parameter		
Injection Molding	Value	Unit
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.25	%
Melt Temperature	280 - 305	°C
Front - Zone 3 Temperature	295 - 305	°C
Middle - Zone 2 Temperature	280 - 295	°C
Rear - Zone 1 Temperature	265 - 275	°C
Mold Temperature	95 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm
	Source GMD Jastu	updatad:02/07/200

Source GMD, last updated:02/07/2008

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

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