



PA 6 G technical sheet

I. Physical Properties

	Test method	Unit	Value
1. Specific gravity	ISO 1183	g/cm ³	1,15
2. Water absorption	ISO 62	%	2,2 / 6,5
3. Maximum permissible service temp. (no stronger mechanical stress involved)	-		-
Upper temperature limit	-	°C	105
Lower temperature limit	-	°C	-40

II. Mechanical Properties

	Test method	Unit	Value
1. Tensile strength at yield	ISO 527	MPa	80 / 60
2. Elongation at yield.	ISO 527	%	-
3. Tensile strength at break	ISO 527	MPa	-
4. Elongation at break	ISO 527	%	40 / 100
5. Impact strength	ISO 179	kJ/m ²	no break
6. Notch impact strength	ISO 179	kJ/m ²	>= 4 / >= 15
7. Ball indentation / Rockwell hardness	ISO 2039-1	MPa	160 / 125
8. Shore-D	DIN 53505		-
9. Flexural strength	ISO 178	MPa	140 / 60
10. Modulus of elasticity	ISO 527	MPa	3100 / 1800

III. Thermal Properties

	Test method	Unit	Value
1. Vicat-softening point	VST/B/50	ISO 306	°C
	VST/A/50		°C
2. Heat deflection temperature	HDT/B	ISO 75	°C
	HDT/A		°C
3. Coefficient of linear thermal expansion	DIN 53752	K ⁻¹ *10 ⁻⁴	0,8
4. Thermal conductivity at 20 °C		W/(m*K)	0,23

IV. Electrical Properties

	Test method	Unit	Value
1. Volume resistivity	VDE 0303	Ω*cm	>= 10 ¹⁵ / >= 10 ¹²
2. Surface resistivity		Ω	>= 10 ¹³ / >= 10 ¹²
3. Dielectric constant at 1MHz		-	3,7 / -
4. Dielectric loss factor at 1 MHz	DIN 53483	-	0,03
5. Dielectric strength	VDE 0303	kV/mm	50 / 20
6. Tracking resistance	IEC 60112	-	

