

Technical Data Sheet

Polyoxymethylene POM-C



I. Physical Properties

	Test method	Unit	Value
1. Specific gravity (ρ)	ISO 1183	g/cm ³	1,39
2. Water absorption	DIN 53495	%	0,2
3. Maximum permissible service temp (no stronger mechanical stress involved)	-	-	-
Upper temperature limit	-	°C	110
Lower temperature limit	-	°C	-50

II. Mechanical Properties

	Test method	Unit	Value
1. Tensile strength at yield	ISO 527	MPa	63
2. Elongation at yield. (ϵ_S)	ISO 527	%	10
3. Tensile strength at break (σ_R)	ISO 527	MPa	-
4. Elongation at break (ϵ_R)	ISO 527	%	31
5. Impact strength (a_n)	ISO 179	kJ/m ²	no break
6. Notch impact strength (a_k)	ISO 179	kJ/m ²	6
7. Ball indentation / Rockwell hardness	ISO 2039-1	MPa	135
8. Shore-D	DIN 53505		85
9. Flexural strength ($\sigma_{B, 3.5\%}$)	ISO 178	MPa	-
10. Modulus of elasticity (E_t)	ISO 527	MPa	2600

III. Thermal Properties

		Test method	Unit	Value
1. Vicat-softening point	VST/B/50	ISO 306	°C	150
	VST/A/50	ISO 306	°C	-
2. Heat deflection temperature	HDT/B	ISO 75	°C	155
	HDT/A	ISO 75	°C	95
3. Coefficient of linear thermal expansion α		DIN 53752	K ⁻¹ *10 ⁻⁴	1,1
4. Thermal conductivity at 20 °C (λ)		DIN 52612	W/(m*K)	0,31

IV. Electrical Properties

	Test method	Unit	Value
1. Volume resistivity	VDE 0303	Ω *cm	$\geq 10^{13}$
2. Surface resistivity (R_o)	VDE 0303	Ω	$\geq 10^{13}$
3. Dielectric constant at 1MHz (ϵ_r)	DIN 53483	-	3,8
4. Dielectric loss factor at 1 MHz ($\tan\delta$)	DIN 53483	-	0,005
5. Dielectric strength	VDE 0303	kV/mm	40
6. Tracking resistance	DIN 53480	-	CTI 600

V. Additional Data

	Test method	Unit	Value
1. Bond ability	-	-	fair
2. Friction coefficient	DIN 53375	-	0,35
3. Flammability	UL 94	-	HB
4. UV stabilisation	-	-	fair

All values are attributes of the used raw materials.

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