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Technical Data Sheet
GEHR ABS

I. Physical Properties

	Test method	Unit	Value
1. Specific gravity (ρ)	ISO 1183	g/cm³	1,04
2. Water absorption	ISO 62	%	0,4
3. Maximum permissible service temp	-	-	-
(no stronger mechanical stress involved)			
Upper temperature limit	-	°C	70
Lower temperature limit	-	°C	-50

II. Mechanical Properties

	Test method	Unit	Value
1. Tensile strength at yield	ISO 527	MPa	45
2. Elongation at yield. (ε_S)	ISO 527	%	-
3. Tensile strength at break (σ_R)	ISO 527	MPa	-
4. Elongation at break (ε_R)	ISO 527	%	-
5. Impact strength (a_n)	ISO 179	kJ/m²	333
6. Notch impact strength (a_k)	ISO 179	kJ/m²	37
7. Ball indentation / Rockwell hardness	ISO 2039-1	MPa	R 105
8. Shore-D	DIN 53505		70
9. Flexural strength ($\sigma_{B\ 3,5\ \%}$)	ISO 178	MPa	67
10. Modulus of elasticity (E_t)	ISO 527	MPa	2260

III. Thermal Properties

		Test method	Unit	Value
1. Vicat-softening point	VST/B/50	ISO 306	°C	103
	VST/A/50	ISO 306	°C	-
2. Heat deflection temperature	HDT/B	ISO 75	°C	100
	HDT/A	ISO 75	°C	88
3. Coefficient of linear thermal expansion α		DIN 53752	$K^{-1}*10^{-4}$	-
4. Thermal conductivity at 20 °C (λ)		DIN 52612	W/(m∗K)	-

IV. Electrical Properties

	Test method	Unit	Value
1. Volume resistivity	VDE 0303	Ω∗cm	-
2. Surface resistivity (R_o)	VDE 0303	Ω	-
3. Dielectric constant at 1MHz (ε_r)	DIN 53483	-	-
4. Dielectric loss factor at 1 MHz (tanδ)	DIN 53483	-	-
5. Dielectric strength	VDE 0303	kV/mm	-
6. Tracking resistance	IEC 60112	-	-

V. Additional Data

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

All values are attributes of the used raw materials.

The physical data contained in this table are typical values. They are obtained on test specimens under specific conditions and represent average values of a large number of tests. The results obtained on this tests specimens cannot be applied to finished parts without reservations, as behaviour is influenced by processing and shaping. Reproduction only with our definite permission.