

Technical Data Sheet



ROTEC® ABS 5001

Injection moulding grade, high-impact

<i>Properties</i>	<i>Unit</i>	<i>Test Method</i>	<i>Test Condition</i>	<i>Value*</i>
<i>Mechanical</i>				
Tensile Modulus	MPa	DIN EN ISO 527	23°C 1 mm/min	2,100
Tensile Strength	MPa	DIN EN ISO 527	23°C 50 mm/min	45
Yield Strain	%	DIN EN ISO 527	23°C 50 mm/min	5
Elongation at Break	%	DIN EN ISO 527	23°C 50 mm/min	20
Flexural Modulus	MPa	DIN EN ISO 178	23°C 2 mm/min	2,200
Flexural Strength	MPa	DIN EN ISO 178	23°C 2 mm/min	70
Notched Impact Strength (Charpy)	kJ/m ²	DIN EN ISO 179/1eA	80 x 10 x 4 mm 23°C	21
Impact Strength (Charpy)	kJ/m ²	DIN EN ISO 179/1eU	80 x 10 x 4 mm 23°C	n.b.
<i>Physical</i>				
Density	g/cm ³	DIN EN ISO 1183	23°C, 50% RH	1.04
Water Absorption	%	DIN EN ISO 62	23°C, 24 h	0.3
<i>Thermal</i>				
Heat Distortion Temperature A	°C	DIN EN ISO 75/1	1.8 MPa	-
Vicat Softening Temperature B 50	°C	DIN EN ISO 306	50 N 50°C/h	97
Melt Mass Flow Rate (MFR)	g/10 min	DIN EN ISO 1133	220°C, 10 kg	18
Thermal Conductivity	W/(K·m)	DIN 52612	--	0.17
Thermal Coefficient of Linear Expansion	10 ⁻⁴ · K ⁻¹	ISO 11359-2	23°C - 55°C	0.9
Processing Shrinkage	%	DIN EN ISO 294-4	23°C	0.5 - 0.7
Flammability (File No.: E148878 → UL listed)	--	UL94	1.5 mm	HB

* = These are average figures, which could vary in each production batch due to addition of pigments, antistatica, slip, uv stabilizer or other.

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