

# Technical Data Sheet



## ROTEC® ABS 3001

*Injection moulding grade, impact-resistant*

<i>Properties</i>	<i>Unit</i>	<i>Test Method</i>	<i>Test Condition</i>	<i>Value*</i>
<b>Mechanical .....</b>				
Tensile Modulus	MPa	DIN EN ISO 527	23°C 1 mm/min	2,400
Tensile Strength	MPa	DIN EN ISO 527	23°C 50 mm/min	47
Elongation at Break	%	DIN EN ISO 527	23°C 50 mm/min	18
Flexural Modulus	MPa	DIN EN ISO 178	23°C 2 mm/min	2,400
Flexural Strength	MPa	DIN EN ISO 178	23°C 2 mm/min	75
Notched Impact Strength (Charpy)	kJ/m <sup>2</sup>	DIN EN ISO 179/1eA	80 x 10 x 4 mm 23°C	16
Impact Strength (Charpy)	kJ/m <sup>2</sup>	DIN EN ISO 179/1eU	80 x 10 x 4 mm 23°C	n.b.
<b>Physical .....</b>				
Density	g/cm <sup>3</sup>	DIN EN ISO 1183	23°C, 50% RH	1.04
Water Absorption	%	DIN EN ISO 62	23°C, 24 h	0.3
<b>Thermal .....</b>				
Heat Distortion Temperature A	°C	DIN EN ISO 75/1	1.8 MPa	91
Vicat Softening Temperature B 50	°C	DIN EN ISO 306	50 N 50°C/h	98
Melt Mass Flow Rate (MFR)	g/10 min	DIN EN ISO 1133	220°C, 10 kg	20
Thermal Conductivity	W/(K·m)	DIN 52612	--	0.18
Thermal Coefficient of Linear Expansion	10 <sup>-4</sup> · K <sup>-1</sup>	ISO 11359-2	23°C - 55°C	0.85
Processing Shrinkage	%	DIN EN ISO 294-4	23°C	0.4 - 0.6
Glow Wire Flammability Index (GWFI)	°C	DIN EN 60695-2-12	3.0 mm	600
Glow Wire Ignition Temperature (GWIT)	°C	DIN EN 60695-2-13	3.0 mm	625
Flammability (File No.: E148878 → UL listed)	--	UL94	1.5 mm	HB
<b>Electrical .....</b>				
Relative Permittivity	--	IEC 60250	100 Hz / 1 MHz	3.1 / 2.9
Specific Volume Resistance	Ohm · m	DIN IEC 60093	--	10 <sup>13</sup>
Specific Surface Resistance	Ohm	DIN IEC 60093	--	10 <sup>15</sup>
Electric Strength	kV/mm	DIN EN 60243-1	1.0 mm	33

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

**ROMIRA GMBH**