

Technical Data Sheet
Status January 2016



ROTEC® PMMA U470/03

PMMA-Compound, deep black, excellent UV resistance

<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	2,030
Tensile Strength	MPa	DIN EN ISO 527	23°C 50 mm/min	49
Elongation at Break	%	DIN EN ISO 527	23°C 50 mm/min	50
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	75
Notched Impact Strength (Charpy)	kJ/m ²	DIN EN ISO 179/1eA	80 x 10 x 4 mm 23°C / -30°C	5.8 / 2.8
Impact Strength (Charpy)	kJ/m ²	DIN EN ISO 179/1eU	80 x 10 x 4 mm 23°C / -30°C	70 / 68
<i>Physical</i>				
Density	g/cm ³	DIN EN ISO 1183	23°C, 50% RH	1.14
Water Absorption	%	DIN EN ISO 62	23°C, 24 h	-
<i>Thermal</i>				
Heat Distortion Temperature A (annealed)	°C	DIN EN ISO 75/1	1.8 MPa	89
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	5.5
Thermal Coefficient of Linear Expansion	10 ⁻⁴ · K ⁻¹	ISO 11359-2	-30°C to +80°C	0.85
Processing Shrinkage	%	DIN EN ISO 294-4	23°C 3,0 mm	0.4 - 0.6
Flammability (own testing)	--	UL94	1.6 mm	HB

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