

Material name, short description	PMMA-GS
Material name, based on technical standards	Polymethyl methacrylate cast
Density	1.19 g/cm³
Color	
Compound code	PMMA-GS 00.006-00
ASTM Code	Thickness 1 mm

Mechanical properties

Modulus of elasticity & tension 1	3300 N/mm² ISO 527-2,1B,1
Tensile strength	≥ 80 N/mm² ISO 527-2,1B,5
Elongation at break	5.5 % ISO 527-2,1B,5
Bending strength 1	115 N/mm² ISO 178 Norm rod 80 x 10 x 4 mm3
Ball indentation hardness	175 N/mm² ISO 2039-1
Impact strength	#ErrorkJ/m² ISO 179/1fU Charpy
Notch impact strength	1.60 kJ/m² ISO 180-1A Izod
Coefficient of sliding friction	0.8; 0.5; 0.45 Plastics on plastics; plastics on steel; steel on plastics

Other attributes

Moisture absorption	2.1 % ISO 62-1 in water
Water absorption	41 mg ISO 62-1 Against dry conditions, test material 60 x 60 x 2 mm2
Refractive index	1.491 ISO 489
Light reflection degree	4 %

Thermal attributes

Max. operating temperature long term	80 °C
Coefficient of linear thermal expansion 1	7 * 10 ⁻⁵ K ⁻¹ DIN 53752-A 0 - 50 °C
Heat deflection temperature 1	115 °C DIN EN ISO 306 Vicat B
Specific heat capacity	1.47 J/(g·K)
Thermal conductivity	0.19 W/(m·K) DIN 52612

Electrical attributes

Comparative tracking index	600 CTI DIN VDE 0303-1
Dielectric dissipation factor 1	0.06 DIN VDE 0303-4 50 Hz
Dielectric dissipation factor 2	0.02 DIN VDE 0303-4 0.1 MHz
Dielectric constant 1	3.6 DIN VDE 0303-3 50 Hz
Dielectric constant 2	2.7 0.1 MHz
Dielectric strength 1	-30 kV/mm DIN VDE 0303-2 1 mm thickness of testmaterial
Surface resistivity	10 ¹³ Ω DIN VDE 0303-3
Volume resistivity	≥10 ¹⁵ Ω*cm DIN VDE 0303-3

In compliance with **RoHS** and **REACH** directives.

This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.