

Acrylglas GS

Polymethylmethacrylat (PMMA)

General properties	Test method	Unit	Guideline value
Density	DIN EN ISO 1183	g / cm ³	1,19
Water absorption	DIN EN ISO 62	%	0,2
Light transmission (3 mm colorless)	EN ISO 13468-2	%	93
Refractive index	ISO 489	n _D ²⁰	1,492
Rockwell Hardness	ISO 2039-2	M-Scale	105
Mechanical properties			
Elongation at break	DIN EN ISO 527	%	6
Tensile modulus of elasticity	DIN EN ISO 527	MPa	3300
Tensile strength	DIN EN ISO 527	MPa	75
Flexural strength	DIN EN ISO 178	MPa	125
Bending modulus of elasticity	DIN EN ISO 178	MPa	3000
Thermal properties			
Thermal conductivity	DIN 52612	W / (m * K)	0,19
Heat deflection temperature (A)	ISO 75-2	°C	105
Specific heat capacity	ISO 3146-C-60°C	°C/gk	2,16
Degradation temperature		°C	> 280
Temperature range of sheet metal forming		°C	140-190
Linear coefficient of expansion	ISO 11359-2	mm / m x °C	0,07
Operating temperature long term	Average	°C	80
Operating temperature short term (max.)	Average	°C	90
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	110
Electrical properties			
Dielectric constant (50 Hz)	DIN 53483-2	---	2,7
Dielectric constant (1 KHz)	DIN 53483-2	---	3,1
Dielectric constant (1 MHz)	DIN 53483-2	---	2,7
Dielectric loss factor (50 Hz)	DIN 53483-2	---	0,06
Dielectric loss factor (1 KHz)	DIN 53483-2	---	0,04
Dielectric loss factor (1 MHz)	DIN 53483-2	---	0,02
Volume resistivity	IEC 60093	Ω * cm	10 ¹⁵
Surface resistivity	IEC 60093	Ω	10 ¹⁴
Tracking resistance	IEC 60243-1	kV / mm	10
Dielectric strength	IEC 60243-1	kV / mm	30

The values given are average values which are backed up by continuous statistical tests. They serve merely as information about our products and are intended as an aid to material selection. They do not constitute a legally binding guarantee of specific properties or suitability for specific applications.