Technical Data Sheet

Acrylglas XT

Polymethylmethacrylat (PMMA)

General properties	Test method	Unit	Guideline value
Density	DIN EN ISO 1183	g / cm³	1,19
Water absorption (24 hours, 23 °) vs. Dry state; test specimen 60 x 60 x 2 mm³	DIN EN ISO 62	mg	38
Weight gain, max. after Water storage	DIN EN ISO 62	%	2,1
Light transmission (3 mm colorless)	DIN 5036-3 / EN ISO 13468-2	%	92
Refractive index	ISO 489	n_D^{20}	1,491
Mechanical properties			
Elongation at break	DIN EN ISO 527-2/1B/5	%	4,5
Tensile modulus of elasticity	DIN EN ISO 527-2	MPa	3300
Flexural strength	DIN EN ISO 178	MPa	105
Notched impact strength	DIN EN ISO 179-1	kJ / m²	1,6
Charpy impact strength	DIN EN ISO 179-1 fu	kJ / m²	15
Tensile strength 23 ° C	DIN EN ISO 527-2/1B/5	MPa	72
Min. permissible cold bending radius	-	MPa	330 x Dicke
Ball indentation hardness	ISO 2039-1	MPa	175
Thermal properties			
Thermal conductivity	DIN 52612	W / (m * K)	0,19
Linear coefficient of expansion	DIN 53752	mm / m x °C	0,07
Service temperature long term	Average	°C	70
Service temperature short term (max.)	Average	°C	90
Forming temperature	-	°C	150-160
Dimensional stability under heat (HDT) a) bending stress 1.8 Mpa b) Bending stress 0.45 Mpa	DIN EN ISO 175	°C	a) 95 b) 100
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	103
Electrical properties			
Dielectric constant (50 Hz)	DIN 53483-2	---	2,8
Dielectric loss factor (50 Hz)	DIN 53483-2	---	0,06
Volume resistivity	DIN VDE 0303 Teil 3	Ω * cm	$> 10^{15}$
Surface resistivity	DIN VDE 0303 Teil 3	Ω	$> 5 * 10^{13}$
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 checks. 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.

KTK Kunststofftechnik Vertriebs GmbH
Industriestr. 16 • 82110 Germering • Tel. +49(89) 8407970 • Fax +49(89) 84058896 • info@ktkgmbh.de • www.ktkgmbh.de
Stand:06.07.2023