PMMA REGENERATED

ACRYLIC GLASS REGENERATED

Material description

The environmentally friendly alternative to original material - massively reduces your C02 footprint! Offcuts from production are reprocessed into new material, but retain their top properties. PMMA XT (clear/transparent) is an amorphous thermoplastic with crystal-clear transparency and a high surface gloss. The surface of PMMA recyclate sheets is highly scratch-resistant. This organic glass has high mechanical strength but low impact resistance. PMMA has excellent weather resistance. Please note that it is sensitive to breakage and susceptible to stress cracking – same as original material (vergin material).

Conformities

RoHS, REACH

Physical properties	Test method	Value	Unit
Density	DIN EN ISO 1183-1	1.19	g/cm3
Water absorbtion	DIN EN ISO 62	2.1	%
Sliding friction		◔	
Abrasion resistance		◔	

Mechanical properties	Test method	Value	Unit
Yield stress	DIN EN ISO 527	70	MPa
Elongation at break	DIN EN ISO 527	4	%
Tensile modulus of elasticity	DIN EN ISO 527	3300	MPa
Notched impact strength	DIN EN ISO 179	2	kJ/m2
Shore Hardness D	DIN EN ISO 868	85	

Thermal properties	Test method	Value	Unit
Thermal conductivity	DIN 52612-2	0.18	W/(m*K)
Heat capacity	DIN 52612-1	1.47	kJ/(kg*K)
Coefficient of thermal expansion	DIN 53752	70	10^{-6*K}-1
Operating temperature short term		90	°C
Operating temperature long term		-40 bis 70	°C
Heat deflection temperature	DIN EN ISO 75 / A	95	°C
Flammability	UL 94, 3 mm	HB	

Electrical properties	Test method	Value	Unit
Volume resistivity	IEC 60093	10^{15}	Ω * cm
Surface resistivity	IEC 60093	10^{13}	Ω * cm
Dielectric strength	IEC 60243	30	kV/mm
Comparative tracking index (CTI)	IEC 60112	600	CTI

These technical data have been determined as average values by our suppliers from many individual measurements. In all measurements, the test specimens were tested in the dry state. We pass on the data with reservation. The table does not claim to be complete or correct. Material technology is subject to constant further development. No rights or guarantees can be derived from it. Own tests are necessary because the environmental and operating conditions (humidity, temperature, mechanical forces, radiation and chemicals, etc.) set limits in the application.

amsler & frey ag
Swiss-machined plastic parts

Amsler & Frey AG
Feldstrasse 26
5107 Schinznach-Dorf

T +41 56 463 60 70
info@amsler-frey.ch

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