

OPTICAL

PROPERTIES	TEST METHOD	UNITS	VALUE
Total light transmittance ⁽³⁾	ISO 13468-1	%	min. 90
Light transmission at 420mm (thickness 3 mm) ⁽³⁾			
-before exposure to a xenon lamp (ISO 4892-2)	ISO 13468-2	%	min. 90
-after exposure to a xenon lamp during 1000h (ISO 4892-2)	ISO 13468-2	%	min. 88
Turbidity	ISO 14782	%	1
Refractive index n_D^{23}	UNE-EN ISO 489 Method A		1.49

ACOUSTIC

PROPERTIES	TEST METHOD	UNITS	VALUE
Soundproofing R_w	DIN 52210	dB	
4 mm			24
6 mm			27
10 mm			29
20 mm			32

ELECTRICAL

PROPERTIES	TEST METHOD	UNITS	VALUE
Specific transversal resistance ρ_D	DIN VDE 0303 P3	Ω cm.	Min. 10^{15}
Dielectric strength E_d (1 mm test piece)	DIN VDE 0302 P2	kV / mm	30
Dielectric constant ϵ	DIN VDE 0302 P4	-	
50 Hz			3.5
10^6 Hz			2.6
Dielectric loss factor $\tan \delta$	DIN VDE 0303 P4	-	
50 Hz			5×10^{-2}
10^6 Hz			5×10^{-2}

1) Clear material.

2) The value specified refers to square test pieces with a 50 cm side and a thickness of 3 mm.

3) For non-coloured transparent material.

NOTE: The values provided are the result of tests conducted on representative samples but are not specifications.

GENERAL

PROPERTIES	TEST METHOD	UNITS	VALUE
Density ¹ ρ	ISO 1183. Method A, C or D	g/cm ³	1.19
Water absorption	UNE-EN ISO 62. Method 1 (24h, 23°C)	%	0.50 ⁽²⁾
Calorific power (760 mm and 0°C)		kJ/Kg °C	1.255
Ignition temperature T_i	ASTM-1929	°C	300
Self-ignition temperature T_{AI}	ASTM-1929	°C	430
Reaction to fire by radiation	UNE 23-727		M4

THERMAL

PROPERTIES	TEST METHOD	UNITS	VALUE
Specific heat c		cal / g °C	0.35
Heat conductivity λ	DIN52612	cal cm / cm ² sec °C	4.5×10^{-4}
Heat transmission coefficient K 3 mm.		kcal / m ² h °C	5.50
Softening temperature VICAT	UNE-EN ISO 306 Method A50	°C	118
Temperature for buckling under load	UNE-EN ISO 75-2/A	°C	98
Recommended moulding temperature		°C	150-170
Maximum service temperature	IRPEN	°C	
Flat sheet			80-85
Moulded part			75-80
Linear dilation coefficient	ISO 11359-2	K ⁻¹	7×10^{-5}
Dimensional variations at high temperature (contraction)	UNE-EN ISO 7823-1 Schedule A	%	max. 2.5

MECHANICAL

PROPERTIES	TEST METHOD	UNITS	VALUE
Tensile strength	UNE-EN ISO 527-2/ 1B/5	MPa	min. 70
Modulus of elasticity in traction	UNE-EN ISO 527-2/ 1B/5	MPa	min. 3000
Deformation in traction	UNE-EN ISO 527-2/ 1B/5	%	min. 4
Flexural strength	UNE-EN ISO 178	MPa	110
Resistance to Charpy impact (test piece not notched)	ISO 179 / 1 fU	kJ/m ²	min. 13
Rockwell hardness	UNE-EN ISO 2039-2	M Scale	100
Friction coefficient μ			
PMMA/PMMA			0.80
PMMA/STEEL			0.48-0.55