

TECHNICAL DATASHEET

EXTRUDED SHEETS OF HIGHT IMPACT

GENERAL

Property	Method	Unit	POLYCASA [®] HIPS M/G	POLYCASA [®] HIPS M/M
Density	ISO 1183	g/cm ³	1,05	1,05
Ball indentation hardness	ISO 2039-1	N/mm ²	80	80

MECHANICAL

Property	Method	Unit	POLYCASA [®] HIPS M/G	POLYCASA [®] HIPS M/M
Flexural modulus	ISO 178	MPa	1850	1800
Flexural strength	ISO 178	Mpa	34	32
Tensile modulus	ISO 527-2	Mpa	1730	1670
Tensile strength	ISO 527-2	Mpa	24	20
Elongation at break	ISO 527-2	%	2,9	42
Stress at break	ISO 527-2	Mpa	18	16
Charpy notched glossy side impacted	ISO 179-1/1fA	KJ/m ²	9	-
Charpy notched matt side impacted	ISO 179-1/1fA	KJ/m ²	6	10

OPTICAL

Property	Method	Unit	POLYCASA [®] HIPS M/G	POLYCASA [®] HIPS M/M
Gloss value*	ISO 2813	-	>100	<75 *

* Gloss level depends on thickness of sheet. For more details ask technical dpt.

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THERMAL				
Property	Method	Unit	POLYCASA® HIPS M/G	POLYCASA® HIPS M/M
Vicat temperature (B50)	ISO 306	°C	92	91
Heat deflection temperature (A)	ISO 75-2	°C	82	84
Linear Thermal expansion	DIN 53752	K ⁻¹ ×10 ⁻⁵	8	8
Service temperature - continuous use	DIN 52612	°C	70	70
Thermal conductivity	ISO 11501	W/mK	0,16	0,16
Dimensional change on heating	ISO 14631	%	5	5,5
ELEKTRICAL				
Property	Method	Unit	POLYCASA® HIPS M/G	POLYCASA® HIPS M/M
Volume resistivity	IEC 93	Ωcm	>10 ¹⁶	>10 ¹⁶
Surface resistivity	IEC 93	Ω	>10 ¹³	>10 ¹³
Dieletrical strength	IEC 243-1	kV/mm	155	155
Dieletrical constant at 100 Hz-1MHz	IEC 250	-	2,5	2,5
Dissipation factor at 100 Hz-1MHz	IEC 250	-	10.4	10.4
OTHER				
Property	Method	Unit	POLYCASA® HIPS M/G	POLYCASA® HIPS M/M
Burning resistance	UL standard 94	-	94 HB	94 HB
Fire performance	DIN EN 13501-1	classification	E	E
Food contact - GMP	EU direction 1035/2004 VO 10/2011	-	Conform	Conform

Notice:

All mentioned data is based on sheets in a thickness of 4 mm.

Technical data of our products are typical ones; the actually measured vallues are subject to production variations.