

METZO[®] PLAST SB/HK

Brief characteristic:

High impact polystyrene (HIPS) with high mechanical properties and good frost resistance.
METZO[®] PLAST SB/HK has a good heat resistance and an improved stress cracking resistance.

Mechanical properties

Yield strength	ISO 527	N/mm ²	16
Elongation at yield	ISO 527	%	3
Tensile strength at break	ISO 527	N/mm ²	16
Elongation at break	ISO 527	%	> 35
Modulus in flexure	EN ISO 178	MPa	1500
Impact strength at 23°C	EN ISO 179/1eU	kJ/m ²	≥ 40
Impact strength at -30°C	EN ISO 179/1eU	kJ/m ²	30
Impact strength notched at 23°C	EN ISO 179/1eA	kJ/m ²	≥ 7
Impact strength notched at -30°C	EN ISO 179/1eA	kJ/m ²	5
Ball Indentation hardness (H 358/30)	EN ISO 2039-1	N/mm ²	80

Thermal properties

Vicat softening point VST B 50	ISO 306	°C	90
ISO/R75 process A	ISO 75	°C	78
ISO/R75 process B	ISO 75	°C	89
Continuous working temperature		°C	~ 70
Thermal coefficient of linear expansion	ISO 7991	10 ⁻⁵ /K	8-10
Thermal conductivity	ISO 8302	W/Km	0,17
Specific heat		kJ/kgK	1,2

Electrical properties

Dielectric constant (at 10 ⁶ Hz)	IEC 250		2,5
Specific volume resistivity	DIN EN 61340-5-1	Ω cm	> 10 ¹⁶
Surface resistivity	DIN EN 61340-5-1	Ω	> 10 ¹³
Dielectric strength	VDE 0303	kV/mm	155

Other properties

Shrinkage		%	0,4 – 0,7
Water absorption, till saturation	ISO 62	%	< 0,1
Density (nature)	ISO 1183	g/cm ³	1,05

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The information submitted on this paper is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors from the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.