

IROPLAST®SB/Economy

Technical Data Sheet

Brief characteristics

Three-layer sheet (sandwich sheet) made of high impact polystyrene based on styrene butadiene in the outer layers and mixed multi-coloured recycled polystyrene in the core, which will be overdyed homogeneous black.

IROPLAST®SB/Economy has slightly lower mechanical properties compared to IROPLAST®SB.

Mechanical properties

Yield strength	DIN 53455	N/mm ²	18
Elongation at yield	DIN 53455	%	2
Tensile strength at break	DIN 53455	N/mm ²	18
Elongation at break	DIN 53455	%	35
Modulus in flexure	DIN 53457-B4	N/mm ²	1500
Flexural stress at conventional deflection	DIN 53452	N/mm ²	30
Impact strength at 23°C	DIN 53453	kJ/m ²	>40
Impact strength at -30°C	DIN 53453	kJ/m ²	20
Impact strength notched at 23°C	DIN 53453	kJ/m ²	6
Impact strength notched at -30°C	DIN 53453	kJ/m ²	5
Ball indentation hardness (H 358/30)	DIN 53456	N/mm ²	

Thermal properties

Vicat softening point VST B 50	DIN 53460	°C	
ISO/R75 process A	DIN 53461	°C	
ISO/R75 process B	DIN 53461	°C	
Continuous working temperature		°C	65
Thermal coefficient of linear expansion	DIN 53752	10 ⁻⁵ /K	
Thermal conductivity	DIN 52612	W/Km	
Specific heat		kJ/kgK	

Electrical properties

Dielectric constant	DIN 53483		
Dissipation factor	DIN 53483	10 ⁻⁴	
Specific volume resistivity	DIN 53482	Ωcm	
Surface resistivity	DIN 53482	Ω	
Dielectric strength	DIN 53481	kV/mm	

Other properties

Shrinkage		%	
Water absorption fill saturation	DIN 53495	%	
Density (standard pigmentation)	DIN 53479	g/cm ³	1,06

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The information submitted on this paper is based on our current knowledge and experience. These are typical values and can't be construed as product specifications. The mechanical properties of this technical information were established with extruded 4 mm thick sheets. The information contained herein is believed to be reliable to the best of our knowledge. However, all recommendations are made without guarantee of performance or warranty of freedom from legal responsibility in view of the many factors that may affect processing and application, this data does not relieve processors from the responsibility of carrying out their own tests and experiments, neither do they imply and 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.

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