



PS conductive Polystyrene

Bahadir Innovation Thermoplast GmbH & Co.KG

Short characteristics

Mixed regenerate from Polystyrene without differentiating between various types of PS coloured in one neutral colour.

Mecanical properties

tensile strength at yield	ISO 527	Mpa	34
elongation at yield stress	ISO 527	%	4
tensile strength	ISO 527	MPa	22
elongation at break	ISO 527	%	4
E-module (4 Pt. bending test)	EN ISO 178	MPa	2200
limiting bending stress	DIN 53452	MPa	45
impact strength at 23°C	EN ISO 179/1eU	kJ/m ²	>35
impact strength at -30 °C	EN ISO 179/1eU	kJ/m ¹³¹	25
notched impact strength at 23 °C	EN ISO 179/1eA	kJ/m ¹³²	10
notched impact strength at -30 °C	EN ISO 179/1eA	kJ/m ¹³³	5
ball hardness (H 358/30)	EN ISO 2039-1	N/mm ²	

Thermal properties

Vicat softening temperature VST B 50	ISO 306	°C	90
ISO/R75 method A	ISO75	°C	
ISO/R75 method B	ISO75	°C	
continuous operating temperature		°C	70
linear thermal expansion coefficient	ISO 7991	10 ⁻⁵ /K	
thermal conductivity	ISO 8302	W/Km	

Electrical properties

dielectric constant	IEC 250		
dielectric loss factor	IEC 250	10 ⁻⁴	
contact resistance	DIN EN 61340-5-1	Ω cm	<10 ³
surface resistance	DIN EN 61340-5-2	Ω	<10 ⁴
dielectric strength	VDE 0303	kV/mm	

Other properties

processing speed		%	
water absorption	ISO 62	%	
explosive density (nature)	ISO 1183	g/cm ³	1,02-1,12

The values indicated are minimum values and could significantly vary based on the different PS products employed.

These values are characteristic properties that are not considered to be product specifications. The mechanical properties as used in this technical specification sheet have been established on extruded plate-bodies of 4 mm thickness. The data of this technical specification sheet have been established using great care. We can however not accept any responsibility since products are used in various different applications.