

Osstyrol[®] PS+PE

HP-PM revision: 01/12

Description

Sheets or foils, made of a polystyrene/polyethylene-blend.

Product information of uncoloured products

Product information of uncoloured products	Test method	Unit	Value
Mechanical properties			
Tensile stress at yield	ISO 527	MPa	17 - 20
Tensile strain at yield	ISO 527	%	-
Tensile stress at break	ISO 527	MPa	16 - 19
Tensile strain at break	ISO 527	%	60 - 80
Tensile modulus	ISO 527	MPa	800 - 1200
Flexural strength	ISO 178	MPa	25 - 30
Charpy impact strength 23°C / -30°C	ISO 179/1eU	kJ/m ²	-
Charpy notched impact strength 23°C / -30°C	ISO 179/1eA	kJ/m ²	-
Izod notched impact strength 23°C	ISO 180/1A	kJ/m ²	25 - 33
Izod notched impact strength -30°C	ISO 180/1A	kJ/m ²	15 - 20
Shore D hardness	ISO 869	Points	-
Thermal properties			
Vicat softening point VST/B/50	ISO 306	°C	-
Vicat softening point VST/A/50	ISO 306	°C	90 - 99
Deflection temperature 1.8 Mpa (HDT A)	ISO 75-A	°C	-
Deflection temperature 0.45 Mpa (HDT B)	ISO 75	°C	-
Electrical properties			
Relative permittivity at 100Hz / 1MHz	IEC 60250		-
Dissipation factor at 100 Hz / 1MHz	IEC 60250	10 Exp. -4	-
Volume resistivity	IEC 60093	Ohm x m	-
Comparative tracking index CTI, A	IEC 60112		-
Electric strength K20/P50	IEC 60243-1	kV/mm	-
Optical properties			
Surface gloss	DIN 67530	%	on demand, depends on colour and surface
Flammability			
Flammability UL at thickness d=1.6 mm	UL 94	Class	-
Other properties			
Density at 23 °C	ISO 1183	g/cm ³	1,0

Particularities

PS+PE has the following advantages compared to pure polystyrene and polyethylene: a higher impact strength and elasticity and a good stress cracking resistance. Application fields for PS+PE are amongst others technical thermoformparts and packaging. PS+PE is 100% recycable. PS+PE can be mixed or coextruded with high impact polystyrene to modify the mechanical and optical properties.

Note

The information submitted in this publication is based on our current knowledge and experience. Tested are uncoloured products. In view of many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of the 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. In order to check the availability of products please contact us or our sales agency.