

Osstyrol PS

HP-PM revision: 08/25

Description

Sheets or foils made of high impact polystyrene (HIPS).

Product information of uncoloured products

	Test method	Unit	Value
Mechanical properties			
Tensile stress at yield	ISO 527	MPa	20 - 26
Strain at yield	ISO 527	%	1,4 - 1,8
Tensile stress at break	ISO 527	MPa	22 - 29
Young's modulus	ISO 527	MPa	1600 - 1800
Charpy-impact strength 23°C / -30°C	ISO 179/1eU	kJ/m ²	
Charpy-impact strength (notched) 23°C	ISO 179/1eA	kJ/m ²	10 - 12
Ball indentation hardness	ISO 2039-1	N/mm ²	around 80
Thermal properties			
Vicat-softening temperature VST/B/50	ISO 306	°C	87 - 92
Electrical properties			
Dielectric constant at 100Hz / 1MHz	IEC 250		2,5
Volume resistivity	IEC 93	Ohm cm	> 10 ¹⁶
Surface resistivity	IEC 93	Ohm	> 10 ¹³
Dielectric strength	IEC 243/1	kV/mm	65
Optical properties			
Surface gloss	DIN 67530	%	on demand, depends on colour and surface
Flammability			
UL94 rating at 1.6 mm thickness	UL 94	class	usual HB, if needed
UL94 rating at 3.2 mm thickness	UL 94	class	please contact
Other properties			
Density at 23 °C	ISO 1183	g/cm ³	1,04
Water absorption, method A	ISO 62	%	< 0,10
Moisture absorption (Equilibrium)	-	%	< 0,10

Particularities

Osstyrol PS is the most used standard product in the product-mix of Hagedorn-Plastirol. It is used in sheets or foils for thermoforming, printing or flat machining. Applications are displays, barrel sections, advertising articles, goods for household or leisure-time. Osstyrol PS is available in nearly every colour and many surfaces. It is possible to bring a protective film on the sheets. If you have higher requirements e.g. for the mechanical properties, please contact our sales agency.

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.