

Osstyrol[®] PS-SUN

HP-PM revision: 01/12

Description

Sheets or foils made of weather resistant polystyrene with high impact strength.

Product information of uncoloured products

	Test method	Unit	Value
Mechanical properties			
Yield stress	ISO 527	MPa	28
Tensile strain at yield	ISO 527	%	1,8
Tensile strain at break	ISO 527	%	21
Tensile modulus	ISO 527	MPa	1900
Flexural strength	ISO 178	MPa	38
Charpy impact strength 23°C	ISO 179/1eU	kJ/m ²	NB
Charpy notched impact strength 23°C	ISO 179/1eA	kJ/m ²	18.0
Izod notched impact strength 23°C	ISO 180/1A	kJ/m ²	
Ball indentation hardness H358/30	ISO 2039-1	MPa	
Thermal properties			
Vicat softening point VST/B/50	ISO 306	°C	83
Vicat softening point VST/A/120	ISO 306	°C	
Deflection temperature 1.8 Mpa (HDT A)	ISO 75-2	°C	74
Deflection temperature 0.45 Mpa (HDT B)	ISO 75-2	°C	
Electrical properties			
Relative permittivity at 100Hz / 1MHz	IEC 60250		
Dissipation factor at 100 Hz / 1MHz	IEC 60250	Ohm cm	
Volume resistivity	IEC 60093	Ohm	
Comparative tracking index CTI, A	IEC 60112		
Electric strength K20/P50	IEC 60243-1	kV/mm	
Optical properties			
Flammability			
Flammability UL at thickness d=1.6 mm	UL 94	Class	HB
Testing of electrical insulating material, method FH	IEC 60707	Level	
Testing of electrical insulating material, method BH	IEC 60707	Level	
Testing of car industry's material (d>1mm)	FMVSS 302		
Other properties			
Density at 23 °C	ISO 1183	g/cm ³	1,01-1,02
Water absorption, method A	DIN 53495/1	%	
Moisture absorption, at standard conditioning atmosphere		%	

Particularities

PS-SUN has less UV-speed compare to ordinary ABS or high impact polystyrene with additive UV-stabilisation due to a particular EPDM rubber component with aligned UV-stabilizer-system and a higher oxidation resistance. PS-SUN is qualified for the use in toys according to EN 71.

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.