Produktinformation

PS High Impact

GENERAL PROPERTIES

Polystyrene Virgin is high impact polystyrene with improved heat resistance and good flow properties.

PHYSICAL PROPERTIES (TYPICAL VALUES)

Property	Value	Unit	Standard	Method
Volume melt-flow rate MVR	**4.8**	cm^3/10 min	ISO 1133	200 °C/5 kg
Vicat softening temperature VST	**89**	°C	ISO 306	B50/oil
Charpy notched impact strength at 23°C	**10**	kJ/m^2	ISO 179	1 eA
Yield stress	**26**	MPa	ISO 527-2	50 mm/min
Tensile strain at yield	**1.8**	%	ISO 527-2	50 mm/min
Tensile stress at break	**25**	MPa	ISO 527-2	50 mm/min
Nominal strain at break	**50**	%	ISO 527-2	50 mm/min
Tensile modulus	**1800**	MPa	ISO 527-2	1 mm/min
Flexural strength	**42**	MPa	ISO 178	2 mm/min
Ball indentation hardness H	**80**	N/mm^2	ISO 2039-1	358 N/30 s
Density	**1040**	kg/m^3	ISO 1183	
Water absorption (after 24 h)	**< 0.1**	%	ISO 62	
Temp. of deflection under load HDT/A	**82**	°C	ISO 75-2	1.8 MPa
Thermal conductivity	**0.16**	W/m·K	DIN 52 612	
Mean therm. coefficient of linear expansion	**0.8·10-4**	K^{-1}	DIN 53 752	(23 - 80)°C
Processing shrinkage	**0.5-0.7**	%	ISO 294-4	

PROCESSING

Polystyrene Virgin can be processed by all conventional techniques using standard conditions for impact polystyrene although it is developed primarily for sheet and foil extrusion. Cups and containers made from Polystyrene Virgin show a very uniform wall thickness distribution.

EXAMPLES OF APPLICATION

Vending cups, dairy packaging and disposable tableware (in blends with GPPS), toys, profiles for furniture and picture frames.

REGULATORY COMPLIANCE

On request, we will be happy to provide you with Regulatory Compliance Statements (RCSs) that affirm our products' conformity to various EU legislations, including food contact. Standard RCSs are available for
legislations on RoHS (Return of Hazardous Substances), WEEE (Waste Electrical and Electronic Equipment), Packaging Waste et al. We can also provide declarations confirming the absence of heavy metals and a range of other substances subject to restrictions under EU Marketing and Use Directives, or prohibited under national
laws and Company Standards. Please contact us for up-to-date regulatory information on any of our products.

FOOD CONTACT COMPLIANCE STATEMENT

Please be informed that Polystyrene complies with the following positive lists/ approvals for food-contact materials and articles:

EU (European Union): Regulation (EU) No 10/2011 as amended, Annex I (Union list of authorised substances).

Manufacturers using the above product for the fabrication of finished products intended to come into contact with food are responsible for compliance by adequate testing or recognized model calculations (eg.
MigraPass). They are also required to comply with the general regulatory requirement that these products do not bring about an unacceptable change in the composition of the foodstuffs or a deterioration in the organoleptic characteristics thereof.

NOTE

The data contained in this publication are based on our current knowledge and experience. Because many factors affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. Responsibility for use, storage, handling and disposal of the product described herein is that of the purchaser or end ser. It is the responsibility of the recipient of our product to ensure that any proprietary rights and existing laws and legislation are observed.