الشركة المصرية لإنتاج الستيرين والبولى ستيرين (استيرنكس)

Egyptian Styrene & Polystyrene Production Company (Estyrenics)

E-styrenics GPPS 123

Technical Data Sheet

Description

E-styrenics GPPS 123 is a general purpose polystyrene grade with a good flow characteristic and improved heat resistance. It is well balanced in its flow characteristic and heat resistance so preferably used for injection molding. It can be extruded as blend component with high impact grades and as a gloss layer for thermoformed foils and sheets.

Examples of Application

Screw caps, cups, containers, sorting boxes, display stands, petri dishes, pens cuvettes, pipettes, audio cassette stands. It is also used in dilution with HIPS to produce dairy sheets.

Property	Specifications	Unit	Conditions	Method
Physical Properties				
Melt Volume Rate	8 – 12	cm^3/10 min	200 °C, 5 kg	ISO 1133
Density	1040	kg/m3		ISO 1183
Thermal Properties				
Vicat Softening Point	88 min	°C	50 °C/hr, 5 kg	ISO 306 B
Mechanical Properties				
Tensile Strength @ break	40	MPa	5 mm/min	ISO 527-2
Tensile Modulus	3200	MPa	1 mm/min	ISO 527-2
Elongation	2	%	5 mm/min	ISO 527-2
Flexural Strength	75	MPa	2 mm/min	ISO 178
Flexural Modulus	2800	MPa	2 mm/min	ISO 178
Charpy Impact	8	KJ/m^2	Unnotched	ISO 179/1eU

E-styrenics GPPS 123 can be supplied in two versions, with or without an internal lubricant. If described as Estyrenics GPPS 123D, “D” indicates that no internal lubricant is used.
Bulk density is approximately 0.6 g/cm3.
E-styrenics GPPS 123 complies with EU regulations NO.10/2011 as amended by EU regulations 1282/2011 and 1183/2012 for use in contact with all classes of foodstuff.

Note:

Information contained in the publication is true and accurate based on our current knowledge and experience.

This information is to help users in processing and application of the product. Before using the product, users should carry out their own investigation and tests as many factors affect processing and application.