

Styrolution PS 116N/L

General Purpose Polystyrene (GPPS)

TECHNICAL DATASHEET

DESCRIPTION

Styrolution PS 116N/L is a general purpose polystyrene grade with excellent flow properties and improved heat resistance.

FEATURES

- Excellent flow properties
- Good heat resistance

APPLICATIONS

- Injection molding
- Injection molded articles
- Cutlery
- Disposable cups

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm ³ /10 min	23
Mechanical Properties			
Charpy Unnotched, 23 °C	ISO 179	kJ/m ²	9
Tensile Stress at Yield, 23 °C	ISO 527	MPa	40
Tensile Strain at Yield, 23 °C	ISO 527	%	1.5
Tensile Modulus	ISO 527	MPa	3100
Flexural Strength, 23 °C	ISO 178	MPa	70
Hardness, Ball Indentation	ISO 2039-1	MPa	150
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	85
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	75
Coefficient of Linear Thermal Expansion	ISO 11359	10 ⁻⁶ /°C	80
Thermal Conductivity	DIN 52612-1	W/(m K)	0.16
Electrical Properties			
Volume Resistivity	IEC 60093	Ohm*m	>1E16
Surface Resistivity	IEC 60093	Ohm	>1E13
Other Properties			

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Density	ISO 1183	kg/m ³	1040
Water Absorption, Saturated at 23 °C	ISO 62	%	< 0.1
Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 62	%	< 0.1
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.4 to 0.6
Melt Temperature Range	ISO 294	°C	180 - 280