

Styrolution PS 124N/L

General Purpose Polystyrene (GPPS)

TECHNICAL DATASHEET

DESCRIPTION

Styrolution PS 124N/L is a general purpose polystyrene grade with a good flow characteristic and an improved heat resistance.

FEATURES

- Excellent flow properties
- Good heat resistance
- UL 94 HB (Antwerp only)

APPLICATIONS

- Blending with HIPS in FFS thermoformed cups
- Injection molded articles
- Petri dishes, cuvettes, pipettes

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm ³ /10 min	12
Mechanical Properties			
Tensile Stress at Yield, 23 °C	ISO 527	MPa	50
Tensile Modulus	ISO 527	MPa	3200
Nominal Strain at Break, 23 °C	ISO 527	%	2
Flexural Strength, 23 °C	ISO 178	MPa	80
Flexural Modulus, 23 °C	ISO 178	MPa	3400
Hardness, Ball Indentation	ISO 2039-1	MPa	150
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	87
Vicat Softening Temperature, B/1 (120 °C/h, 10N)	ASTM D 1525	°C	102
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	78
Coefficient of Linear Thermal Expansion	ISO 11359	10 ⁻⁶ /°C	80
Thermal Conductivity	ISO 22007-4	W/(m K)	0.16
Electrical Properties			
Volume Resistivity	IEC 62631-3-1	Ohm*m	>10 ¹⁶
Surface Resistivity	IEC 62631-3-1	Ohm	>10 ¹³
Optical Properties			

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Property, Test Condition	Standard	Unit	Values
Refractive Index, Sodium D Line	ISO 489	-	1.56
Light Transmission at 550 nm	ASTM D 1003	%	91.4
Haze	ASTM D 1003	%	0.3
Other Properties			
Density	ISO 1183	kg/m ³	1040
Processing			
Melt Temperature Range	ISO 294	°C	180 - 280