

Styrolution PS 476L

High Impact Polystyrene
INEOS Styrolution Group GmbH

Message:

Styrolution PS 476L is a normal flow and very high impact Polystyrene. It gives good mechanical and heat resistance properties while providing with easy processability and short cycle time.

General Information	
UL YellowCard	E108538-100840251
Features	Fast Molding Cycle
	Good Processability
	High Impact Resistance
	Medium Heat Resistance
Uses	Appliances
	Cups
	Electrical/Electronic Applications
	Food Packaging
	Household Goods
	Housings
	Sheet
	Toys
Forms	Granules
Processing Method	Extrusion
	Injection Molding

Physical	Nominal Value	Unit	Test Method
Density	1.05	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (200°C/5.0 kg)	5.50	cm ³ /10min	ISO 1133
Molding Shrinkage	0.40 to 0.70	%	ISO 294-4
Water Absorption			ISO 62
Saturation, 23°C	< 0.10	%	
Equilibrium, 23°C, 50% RH	< 0.10	%	
Hardness	Nominal Value	Unit	Test Method
Ball Indentation Hardness	85.0	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1850	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	27.0	MPa	ISO 527-2
Tensile Strain			ISO 527-2

Yield, 23°C	1.5	%	
Break, 23°C	30	%	
Flexural Modulus	1950	MPa	ISO 178
Flexural Stress	40.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	15	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength			ISO 179
-30°C	130	kJ/m ²	
23°C	No Break		
Notched Izod Impact Strength (23°C)	11	kJ/m ²	ISO 180/A
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Annealed	89.0	°C	ISO 75-2/B
1.8 MPa, Annealed	80.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	98.0	°C	ISO 306/A50
--	90.0	°C	ISO 306/B50
CLTE - Flow	1.0E-4	cm/cm/°C	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+13	ohms	IEC 60093
Volume Resistivity	> 1.0E+18	ohms·cm	IEC 60093
Electric Strength ¹ (1.50 mm)	160	kV/mm	IEC 60243-1
Dielectric Constant			
100 Hz	2.50		IEC 60250
1 MHz	2.50		IEC 60250
Dissipation Factor (1 MHz)	4.0E-4		IEC 60250
Optical	Nominal Value		Test Method
Gardner Gloss (60°)	35		ASTM D523
Injection	Nominal Value	Unit	
Processing (Melt) Temp	180 to 260	°C	
Mold Temperature	10.0 to 60.0	°C	
Injection Velocity	200	mm/sec	
NOTE			
1.	Short Time		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

