

Styrolution PS 2710

High Impact Polystyrene
INEOS Styrolution Group GmbH

Message:

Styrolution PS 2710 is a high impact grade of polystyrene with improved stress crack resistance, developed for extrusion and thermoforming applications, especially for the refrigerator industry.

General Information			
UL YellowCard	E108538-100840240		
Features	High ESCR (Stress Crack Resist.)		
	High Impact Resistance		
Uses	Appliance Components		
	Food Packaging		
	Liners		
	Packaging		
	Sheet		
Forms	Granules		
Processing Method	Extrusion		
	Sheet Extrusion		
	Thermoforming		
Physical	Nominal Value	Unit	Test Method
Density	1.05	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (200°C/5.0 kg)	5.00	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	65.0	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1600	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	22.0	MPa	ISO 527-2
Tensile Strain			ISO 527-2
Yield, 23°C	1.8	%	
Break, 23°C	50	%	
Flexural Modulus	1500	MPa	ISO 178
Flexural Stress	32.0	MPa	ISO 178

Films	Nominal Value	Unit	Test Method
Tensile Elongation - MD (Break)	50	%	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-30°C	7.0	kJ/m ²	
23°C	10	kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179
-30°C	120	kJ/m ²	
23°C	No Break		
Notched Izod Impact Strength			ISO 180/A
-30°C	7.0	kJ/m ²	
23°C	12	kJ/m ²	
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Annealed	90.0	°C	ISO 75-2/B
1.8 MPa, Annealed	82.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	97.0	°C	ISO 306/A50
--	92.0	°C	ISO 306/B50
CLTE - Flow	1.0E-4	cm/cm/°C	ISO 11359-2
Thermal Conductivity	0.17	W/m/K	DIN 52612
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+14	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			IEC 60250
100 Hz	4.0E-4		
1 MHz	4.0E-4		
Optical	Nominal Value		Test Method
Gardner Gloss (60°)	20		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.

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



WECHAT