

# STYROLUTION PS 8265

High Impact Polystyrene (HIPS)

## TECHNICAL DATASHEET

### DESCRIPTION

INEOS STYROLUTION 8265 is a high impact polystyrene for extrusion/thermoforming applications that require exceptional resistance to attack from fats and oils.

This grade has been specifically designed to display a high resistance to environmental stress cracking (ESCR).

### FEATURES

- Environmental stress cracking resistance (ESCR)
- Balanced mechanical properties
- High impact

### APPLICATIONS

- Thermoformed Sheet
- Fridge liners
- Food and Low temperature packaging

Property, Test Condition	Standard	Unit	Values
<b>Rheological Properties</b>			
Melt Flow Rate, 200 °C/5 kg	ISO 1133	g/10 min	3.5
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm <sup>3</sup> /10 min	3.1
<b>Mechanical Properties</b>			
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m <sup>2</sup>	13
Tensile Stress at Yield, 23 °C	ISO 527	MPa	19
Tensile Modulus	ISO 527	MPa	1600
Elongation at Break (MD)	ISO 527	%	70
Flexural Strength, 23 °C	ISO 178	MPa	35
Flexural Modulus, 23 °C	ISO 178	MPa	1600
Hardness, Rockwell	ISO 2039-2	R scale	78
<b>Thermal Properties</b>			
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	95
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	83
Heat Deflection Temperature A; (unannealed; 1.8 MPa)	ISO 75	°C	70
Heat Deflection Temperature B; (unannealed; 0.45 MPa)	ISO 75	°C	82
Coefficient of Linear Thermal Expansion	ISO 11359	10 <sup>-6</sup> /°C	91
<b>Electrical Properties</b>			

# STYROLUTION PS 8265

High Impact Polystyrene (HIPS)

## TECHNICAL DATASHEET

Property, Test Condition	Standard	Unit	Values
Dielectric Strength, Short Time, 1.5 mm	IEC 60243-1	kV/mm	150
Surface Resistivity	IEC 62631-3-1	Ohm	>10 <sup>13</sup>
<b>Optical Properties</b>			
Yellowness Index	DIN 6167	-	-10
<b>Other Properties</b>			
Density	ISO 1183	kg/m <sup>3</sup>	1.04
Bulk Density (without external lubricant)	-	kg/m <sup>3</sup>	0.6
Water Absorption, Saturated at 23 °C	ISO 62	%	0.06
UL94 rating at 1.5 mm thickness	IEC 60695-11-10	-	HB
<b>Processing</b>			
Linear Mold Shrinkage	ISO 294-4	%	0.4 - 0.7
Drying Temperature	-	°C	70
Drying Time	-	h	2
Max Service Temperature	-	°C	240