

# Styrolution PS 6220

High Impact polystyrene (HIPS)

TECHNICAL  
DATASHEET

## DESCRIPTION

High Impact polystyrene 6220/6221 is a tough, high gloss product

## FEATURES

- Single use foodservice
- High gloss
- Designed for deep draw thermoforming
- USP Class VI compliant
- UL Classification 94HB

## APPLICATIONS

- Single use foodservice
- Profile extrusion
- Thin wall thermoformed containers
- Portion containers
- Medical and pharmaceutical packaging
- Injection molding

Property, Test Condition	Standard	Unit	Values
<b>Rheological Properties</b>			
Melt Flow Rate, 200 °C/5 kg	ASTM D 1238	g/10 min	3
<b>Mechanical Properties</b>			
Izod Notched Impact Strength, 23 °C (73 °F)	ASTM D 256	ft-lb/in	3.8
Tensile Stress at Yield, 23 °C	ASTM D 638	psi	3450
Tensile Modulus	ASTM D 638	psi x 10 <sup>3</sup>	290
Elongation, Failure	ASTM D 638	%	40
Flexural Strength, 23 °C	ASTM D 790		6600
Flexural Modulus, 23 °C	ASTM D 790	psi x 10 <sup>3</sup>	290
Hardness, Rockwell	ASTM D 785	L Scale	57
<b>Thermal Properties</b>			
Vicat Softening Temperature, B/1 ( 120 °C/h, 10N)	ASTM D 1525	°F	210
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	-	°F	194
Coefficient of Linear Thermal Expansion	ASTM D 696	10 <sup>-4</sup> /°F	0.5
<b>Electrical Properties</b>			
Dielectric Constant at 106 CPS (1000000 Hz, 0,0394 in)	ASTM D 150	-	2.5
Dielectric Strength, 1/8"	ASTM D 149	kV/in	400

# Styrolution PS 6220

High Impact polystyrene (HIPS)

## TECHNICAL DATASHEET

Property, Test Condition	Standard	Unit	Values
<b>Optical Properties</b>			
Specular Gloss, 60 °	ASTM D 523		90
<b>Other Properties</b>			
Density (ASTM )	ASTM D 792	g/cm <sup>3</sup>	1.04
Bulk Density (without external lubricant)	-	lb/ft <sup>3</sup>	37 - 40
Bulk Density (with external lubricant)	-	lb/ft <sup>3</sup>	42 - 45
<b>Processing</b>			
Linear Mold Shrinkage	ASTM D 955	in/in	0.004-0.007
Melt Temperature Range	-	°F	360 - 525
Mold Temperature Range	-	°F	100 - 180