

# Styrolux 656C

Styrene Butadiene Copolymer (SBC)

## TECHNICAL DATASHEET

### DESCRIPTION

Styrolux® 656C is a clear styrene-butadiene copolymer (SBC) with enhanced flow properties. It is used almost exclusively for injection molding of rigid, tough parts requiring highest levels of clarity and surface gloss. Styrolux® 656C is sterilizable by gamma-rays and offers good hinge properties.

### FEATURES

- Tough and stiff grade
- Enhanced flowability
- High clarity

### APPLICATIONS

- Moulded containers and bottles
- Toys
- Displays
- Appliance housings
- Medical devices
- Garment hangers

Property, Test Condition	Standard	Unit	Values
<b>Rheological Properties</b>			
Melt Flow Rate, 200 °C/5 kg	ASTM D 1238	g/10 min	15
<b>Mechanical Properties</b>			
Instrumented Dart Impact (total energy)	ASTM D 3763	in-lbs	5.33
Instrumented Dart Impact (Peak force)	ASTM D 3763	in-lbs	5.33
Tensile Stress at Yield, 23 °C	ASTM D 638	psi	4060
Tensile Modulus	ASTM D 638	psi x 10 <sup>3</sup>	244
Elongation, Failure	ASTM D 638	%	40
Flexural Strength, 23 °C	ASTM D 790		4790
Flexural Modulus, 23 °C	ASTM D 790	psi x 10 <sup>3</sup>	217
Hardness, Shore D	ASTM D 2240	-	72
<b>Thermal Properties</b>			
Vicat Softening Temperature, B/1 ( 120 °C/h, 10N)	ASTM D 1525	°F	194
DTUL @ 264 psi - Unannealed	ASTM D 648	°F	152
DTUL @ 66 psi - Unannealed	ASTM D 648	°F	177
Coefficient of Linear Thermal Expansion	ASTM D 696	10 <sup>-4</sup> /°F	0.72

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Property, Test Condition	Standard	Unit	Values
<b>Electrical Properties</b>			
Dielectric Constant at 106 CPS (1000000 Hz, 0,0394 in)	ASTM D 150	-	2.5
Volume Resistivity	ASTM D 257	-	>10 <sup>13</sup>
Surface Resistivity	ASTM D 257	-	>10 <sup>14</sup>
<b>Optical Properties</b>			
Refractive Index, Sodium D Line	ASTM D 542	-	1.579
Light Transmission at 550 nm	ASTM D 1003	%	90
<b>Other Properties</b>			
Density	ASTM D 792	lb/in <sup>3</sup>	1.02
Water Absorption, Saturated at 23 °C	ASTM D 570	%	0.07
<b>Processing</b>			
Linear Mold Shrinkage	ASTM D 955	in/in	0.0065