The Versatile Plastic Material That is Easy to Machine and Fabricate

King High-Impact Polystyrene is a low cost and versatile plastic material that is easy to machine and fabricate. HIPS is often specified for low strength structural applications when impact resistance, machine-ability, and low cost are required. It is frequently used for machining pre-production prototypes since it has excellent dimensional stability and is easy to fabricate, paint and glue. Natural (translucent natural) HIPS is FDA compliant for use in food processing applications.

King Plastic Corporation produces 48”x96” molded High-Impact Styrene sheets in translucent natural.

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Applications

- Fixtures
- Food Packaging
- Kiosks
- Models and Prototypes
- Printed Advertising Graphics
- Point-of-Purchase Displays
- Shelving
- Thermo-formed Machine Housings
### Specifications

#### Standard Sheet Size
- **in:** 48” x 96”
- **mm:** 1219mm x 2438mm

#### Standard Gauges
- **in:** 1/2” | 5/8” | 3/4” | 1” | 1-1/4”
- **mm:** 12.7mm | 8.25mm | 19.05mm | 25mm | 31.75mm
- **in:** 1-1/2” | 1-3/4” | 2” | 2-1/4” | 2-1/2”
- **mm:** 38.1mm | 44.45mm | 50.8mm | 57.15mm | 63.5mm

#### Approximate Weight
- **lbs:** 86 lbs | 108 lbs | 130 lbs | 173 lbs | 216 lbs
- **kg:** 39kg | 48.9kg | 58.9kg | 78.47kg | 97.9kg
- **lbs:** 260 lbs | 303 lbs | 346 lbs | 389 lbs | 433 lbs
- **kg:** 117.9kg | 137.4kg | 156.9kg | 176.4kg | 196.4kg

#### Tolerance Information:
- **Compression Molding**
  - Gauges 1/2” through under 1-1/2” ± 10%
  - Gauges 1-1/2” and greater plus only
  - Length and width plus only at room temperature

#### Custom gauges available

### Standard Color
- **Natural**

*Note: Color accuracy can vary considerably on computer monitors and printers. Please consult your distributor for a product sample before making critical color choices.

### Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Units</th>
<th>ASTM</th>
<th>Nominal Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>g/cc</td>
<td>D792</td>
<td>1.04</td>
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<tr>
<td>Tensile Strength @ Break</td>
<td>%</td>
<td>D638</td>
<td>50</td>
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<tr>
<td>Elongation @ Yield</td>
<td>psi</td>
<td>D638</td>
<td>&gt;3,000</td>
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<tr>
<td>Flexural Modulus</td>
<td>psi</td>
<td>D790</td>
<td>240,000</td>
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<tr>
<td>Flexural Yield Strength</td>
<td>psi</td>
<td>D790</td>
<td>4,210</td>
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<tr>
<td>Izod Impact, Notched</td>
<td>ft.lbs./in.²</td>
<td>D256</td>
<td>2.8</td>
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<tr>
<td>Vicat Softening Temp.</td>
<td>ºC (ºF)</td>
<td>D1525</td>
<td>99ºC (210ºF)</td>
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<tr>
<td>Heat Deflection Temp. 264 psi</td>
<td>ºC (ºF)</td>
<td>D648</td>
<td>85ºC (185ºF)</td>
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<tr>
<td>Flammability</td>
<td>Rating</td>
<td>UL94</td>
<td>HB</td>
</tr>
</tbody>
</table>

*All values are determined on specimens prepared according to ASTM Standards.
Nominal values should not be interpreted as specifications.
King High-Impact Polystyrene is made from FDA materials.