## High Density Polyethylene (HDPE) -- Injection Grade Data Sheets

### Properties

<table>
<thead>
<tr>
<th>Grade</th>
<th>Rotation</th>
<th>Injection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>3840</td>
</tr>
<tr>
<td>Melt Index MI&lt;sub&gt;2.16&lt;/sub&gt; (g/10min)</td>
<td>ASTM D1238</td>
<td>5.0</td>
</tr>
<tr>
<td>Melt Index MI&lt;sub&gt;5/MI&lt;/sub&gt; (5/MI)</td>
<td>ASTM D1238</td>
<td>21.6</td>
</tr>
<tr>
<td>Density (g/cm³)</td>
<td>ASTM D1505</td>
<td>0.938</td>
</tr>
</tbody>
</table>

### Thermal Properties

- Melting point (°C): 125 (FPC Method), 132, 131, 133
- Brittleness point (°C): <-70
- Softening point (°C): 118, 125, 122, 125

### Mechanical Properties

- Tensile strength at yield (Kg/cm²): 150, 300, 230, 310
- Tensile strength at break (Kg/cm²): 220, 240, 260, 240
- Elongation at break (%): >1000, 900, 900, 900
- Tensile Impact Strength (kg. cm/cm²): 140, 200, 180, 140
- Izod Impact Strength (Kg-cm/cm notch): 20, 10, 12, 6
- Hardness (Shore D): 60, 69, 66, 70
- ESCR (Hours): 60, 69, 66, 70
- Die Swell Ratio (%): 0.00%
- Pinch-off thickness: 0.00

### Electrical Properties

- Dielectric Constant 1 MHz: ASTM D1531
- Dissipation Factor 1 MHz: ASTM D1531
- Volume Resistivity (Ohm-cm): ASTM D257

### Characteristics

- Easy Processing
- High Strength
- Good Low Temperature Brittle Resistance
- Very Good Impact Strength
- High Rigidity
- High Warpage Resistance

### Application

- Large Crate Containers
- Tank
- Barricade
- Pails
- Pallet
- Industrial containers
- Bottle cap
- High Toughness Parts
- Crates
- Boxes
- Seats
- Pallet

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**PS.:**

1. Processing Condition: Injection Temperature= 170 - 190 °C
2. Data shown are average values and should not be examined for specifications.
3. Sales Department: Taiwan Tel: 886-2-27178141, Fax: 886-2-27193260

[http://www.upmold.com](http://www.upmold.com)
[info@upmold.com](mailto:info@upmold.com)