

Technical Data Sheet  
**IPETHENE® 100**  
 Low Density Polyethylene



**Product Description**

**IPETHENE® 100** is a low-density polyethylene film grade, produced by high-pressure autoclave technology.

<b>Features:</b>	<ul style="list-style-type: none"> <li>No additives</li> <li>Good mechanical properties</li> </ul>	<ul style="list-style-type: none"> <li>Excellent bubble stability</li> </ul>
<b>Uses:</b>	<ul style="list-style-type: none"> <li>Heavy duty bags</li> <li>Agricultural films</li> <li>Construction films</li> <li>Flexible tubes</li> </ul>	<ul style="list-style-type: none"> <li>Squeezable bottles</li> <li>Shrink films</li> <li>Pipes</li> <li>Liners</li> </ul>
<b>Processing Methods:</b>	<ul style="list-style-type: none"> <li>Blown film extrusion</li> <li>Blow molding</li> </ul>	<ul style="list-style-type: none"> <li>Pipe extrusion</li> </ul>

Properties		Method	Typical Value*	Unit
<b>Physical</b>				
<b>Melt Flow Rate</b>	(190°C/2.16 kg)	ISO 1133	0.3	g/10 min
<b>Density</b>		ISO 1183-A	0.920	g/cm <sup>3</sup>
<b>Thermal</b>				
<b>Peak Melting Temperature</b>	By DSC	ISO 11357-3	109	°C
<b>Vicat Softening Temperature</b>	(10 N)	ISO 306	96	°C
<b>Mechanical**</b>				
<b>Dart Drop Impact</b>	(F <sub>50</sub> )	ISO 7765-A	470	g
<b>Tensile Stress at Break</b>	(MD/TD)	ISO 527-3	22/22	MPa
<b>Tensile Strain at Break</b>	(MD/TD)	ISO 527-3	650/650	%
<b>Elmendorf Tear Strength</b>	(MD/TD)	ISO 6383-2	300/500	g

\*Typical values; not to be construed as specifications.

\*\* Measured on 100 µm blown film, Blow-up ratio 2.5:1, output 10 kg/h, melt temperature ~210°C.

**Processing Recommendations**

IPETHENE® 100 can be easily processed on conventional extruders at melt temperature range 180-220°C. Due to differences in screw and die head designs, processing conditions should be optimized for each production line. With suitable equipment, it can be drawn down to 60 µm films.

**Health, Quality, Regulations and Safety**

This product is not classified as dangerous substance. Material safety data sheets, international standards certificates (e.g. ISO 9001) and other regulatory documents are available on our website. This product is not intended for use in medical or pharmaceutical applications and we do not support its use for such applications.

**Date: June 2017**