## **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.

Features:	<ul><li>No additives</li><li>Good mechanical properties</li></ul>	<ul> <li>Excellent bubble stability</li> <li>Squeezable bottles</li> <li>Shrink films</li> <li>Pipes</li> <li>Liners</li> </ul>	
Uses:	<ul><li>Heavy duty bags</li><li>Agricultural films</li><li>Construction films</li><li>Flexible tubes</li></ul>		
Processing Methods:	<ul><li>Blown film extrusion</li><li>Blow molding</li></ul>	Pipe extrusion	

Properties		Method	Typical Value*	Unit
Physical				
Melt Flow Rate	(190°C/2.16 kg)	ISO 1133	0.3	g/10 min
Density		ISO 1183-A	0.920	g/cm³
Thermal				
Peak Melting Temperature	By DSC	ISO 11357-3	3 109	°C
Vicat Softening Temperature	(10 N)	ISO 306	96	°C
Mechanical**				
Dart Drop Impact	(F <sub>50</sub> )	ISO 7765-A	470	g
Tensile Stress at Break	(MD/TD)	ISO 527-3	22/22	MPa
Tensile Strain at Break	(MD/TD)	ISO 527-3	650/650	%
Elmendorf Tear Strength	(MD/TD)	ISO 6383-2	300/500	g

<sup>\*</sup>Typical values; not to be construed as specifications.

## **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.

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<sup>\*\*</sup> Measured on 100  $\mu$ m blown film, Blow-up ratio 2.5:1, output 10 kg/h, melt temperature  $\sim$ 210°C.