## 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>	Excellent bubble stability
Uses:	<ul><li>Heavy duty bags</li><li>Agricultural films</li><li>Construction films</li><li>Flexible tubes</li></ul>	<ul><li>Squeezable bottles</li><li>Shrink films</li><li>Pipes</li><li>Liners</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				
<b>Peak Melting Temperature</b>	By DSC	ISO 11357-3	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	МРа
Tensile Strain at Break	(MD/TD)	ISO 527-3	650/650	%

<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  $60 \mu m$  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. Carmel Olefins products have not been tested and therefore not validated for use in pharmaceutical/medical applications, and their suitability for these uses cannot be guaranteed. It is the customer's responsibility to test and approve their technical and regulatory suitability in order to satisfy themselves as to the particular purpose and application(s).

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