

Technical Data Sheet
IPETHENE® 111
 Low Density Polyethylene



Product Description

IPETHENE® 111 is a low-density polyethylene film grade, produced by high-pressure autoclave technology.

Features:	<ul style="list-style-type: none"> No additives Excellent bubble stability Good mechanical properties 	<ul style="list-style-type: none"> Good processability Good optical properties
Uses:	<ul style="list-style-type: none"> Medium duty bags Agricultural films Multilayer and lamination films 	<ul style="list-style-type: none"> Squeezable bottles Liners Pouches Shrink films
Processing Methods:	<ul style="list-style-type: none"> Blown film extrusion 	<ul style="list-style-type: none"> Blow molding

Properties		Method	Typical Value*	Unit
Physical				
Melt Flow Rate	(190°C/2.16 kg)	ISO 1133	0.7	g/10 min
Density		ISO 1183-A	0.920	g/cm ³
Thermal				
Peak Melting Temperature	By DSC	ISO 11357-3	109	°C
Vicat Softening Temperature	(10 N)	ISO 306	95	°C
Mechanical**				
Dart Drop Impact	(F ₅₀)	ISO 7765-A	280	g
Tensile Stress at Break	(MD/TD)	ISO 527-3	27/25	MPa
Tensile Strain at Break	(MD/TD)	ISO 527-3	450/700	%
Elmendorf Tear Strength	(MD/TD)	ISO 6383-2	350/250	g
Optical**				
Haze		ASTM D 1003	7	%
Gloss	(45°)	ASTM D 2457	70	%

*Typical values; not to be construed as specifications.

** Measured on 50 µm blown film, Blow-up ratio 2.5:1, output 10 kg/h, melt temperature ~180°C.

Processing Recommendations

IPETHENE® 111 can be easily processed on conventional extruders at melt temperature range 160-180°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 25 µm films.

Health, Quality, Regulations and Safety

Date: June 2017