Technical Data Sheet

IPETHENE® 101

Low Density Polyethylene

CARMEL OLEFINS

Product Description

IPETHENE® 101 is a low-density polyethylene film grade, produced by high-pressure autoclave technology.

Features:	• No additives • Good mechanical properties	• Excellent optical properties
Uses:	• Agricultural films • Flexible tubes	• Squeezable bottles • Shrink films • Liners
Processing Methods:	• Blown film extrusion • Blow molding	• 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	0.921	g/cm^3
Thermal				
Peak Melting Temperature	By DSC	ISO 11357-3	109	°C
Vicat Softening Temperature	(10 N)	ISO 306	97	°C
Mechanical**				
Dart Drop Impact	(F_{50})	ISO 7765-A	500	g
Tensile Stress at Break	(MD/TD)	ISO 527-3	31/29	MPa
Tensile Strain at Break	(MD/TD)	ISO 527-3	500/700	%
Elmendorf Tear Strength	(MD/TD)	ISO 6383-2	370/480	g
Optical**				
Haze		ASTM D 1003	8	%
Gloss	(45°)	ASTM D 2457	65	%

*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.

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