

Technical Data Sheet
IPETHENE® 322
 Low Density Polyethylene



Product Description

IPETHENE® 322 is a low-density polyethylene film grade, produced by high-pressure autoclave technology.

Features:	<ul style="list-style-type: none"> • Medium level slip and anti-block additives • Heat stabilized • BHT free 	<ul style="list-style-type: none"> • Excellent draw-down • Good optical properties • Good processability
Uses:	<ul style="list-style-type: none"> • Carrier and shopping bags • Thin packaging films 	<ul style="list-style-type: none"> • Bubble films • Foamed sheets
Processing Methods:	<ul style="list-style-type: none"> • Blown film extrusion • Cast film extrusion 	<ul style="list-style-type: none"> • Foaming

Properties		Method	Typical Value*	Unit
Physical				
Melt Flow Rate	(190°C/2.16 kg)	ISO 1133	2.0	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	93	°C
Mechanical**				
Dart Drop Impact	(F ₅₀)	ISO 7765-A	170	g
Tensile Stress at Break	(MD/TD)	ISO 527-3	24/21	MPa
Tensile Strain at Break	(MD/TD)	ISO 527-3	500/750	%
Elmendorf Tear Strength	(MD/TD)	ISO 6383-2	450/250	g
Optical**				
Haze		ASTM D 1003	6.5	%
Gloss	(45°)	ASTM D 2457	78	%

*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 ~170°C.

Processing Recommendations

IPETHENE® 322 can be easily processed on conventional extruders at melt temperature range 155-175°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.

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