

Technical Data Sheet
IPETHENE® 323
Low Density Polyethylene
Description

IPETHENE® 323 is a low density polyethylene extrusion grade, produced by high pressure autoclave technology. This grade is particularly suitable for the production of blown & cast transparent thin films. It has excellent draw-down, good optical and processing properties.

Additives

This grade contains a high level of anti-blocking and slip additives. It is heat stabilized but BHT free.

Applications

IPETHENE® 323 is suitable for carrier and shopping bags, liners, pouches, bubble films, foams, general packaging films and thin shrink films.

Quality, Environmental and Safety Regulations

Material Safety Data Sheets and other regulatory documents are available on our web site <http://www.caol.co.il>

Resin 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		ISO 306	93	°C
Film Properties**				
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
Haze		ASTM D 1003	7	%
Gloss	(45°)	ASTM D 2457	65	

* 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® 323 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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Last updated: July 2012