

Linear Low Density Polyethylene LL5405S

Description:

LL5405S is a Linear Low Density Polyethylene (LLDPE) developed for blown film extrusion. Films obtained with this product show a good processing performance balanced with good mechanical properties as well as processability. Very low gel amount.

Additive:

Antiblocking – High
Slip - High

Applications:

LLDPE and HDPE blends, films with low thickness for general use, bags for waste, special bags for water and protection of clothes.

Process:

Blown film extrusion.

Control Properties:

	ASTM Method	Units	Value
Melt Flow Rate (190/2.160)	D 1238	g/10 min	1.0
Density	D 792	g/cm ³	0.919

Typical Properties:

Blown Film Properties^a

	ASTM Method	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	35/25
Elongation at Break (MD/TD)	D 882	%	1000/1200
Flexural Modulus – 1% Secant (MD/TD)	D 882	MPa	160/180
Dart Drop Impact	D 1709	g/F50	120
Elmendorf Tear Strength (MD/TD)	D 1922	gF	90/900
Haze	D 1003	%	18
Gloss – Angle 45°	D 2457	-	55
Gloss – Angle 60°	D 2457	-	80
COF internal 72h	D 1894	-	0,10
Blocking Load	D 3354	gf/100cm ²	8

(a) 40 µm thickness film, processed in a 40 mm screw diameter extruder with blow up ratio of 2, 2:1 (MD = Machine Direction; TD = Transversal Direction)

Recommended Processing Conditions:
Blown Film Extrusion

- Temperature Profile:..... from 180 to 210°C
- Blow up Ratio:..... from 2 to 3:1
- Die Gap:..... from 1.8 to 2.5 mm
- Screen Package:..... 40/40 - 100% pure
40/60/40 - Blend
- Mass Temperature:..... 190°C (max 210°C)

