Braskem

Data Sheet

Low Density Polyethylene TS9022

Description:

TS9022 is a low density polyethylene (LDPE), developed specially for automatic overwrap packaging. This resin has a combination of high optical properties and excellent stiffness. The incorporated additive package consists of an antiblocking agent in high level and a slip agent in medium level, to guarantee a low coefficient of friction (COF), which fundamental for improved machineability in overwrap applications. This product is identified as PE 123 according to ASTM D-4976-04a standard specification.

Additivation:

Antiblocking agent

Slip agent

Application:

Films for automatic overwrap packaging of hygiene markets. Typical applications are toilet tissue, kitchen paper, and napkin (paper products) overwrap.

Laminated films for food packaging with (PP or BOPP), for products such as coffee, crackers, and powder milk.

Films which require good optical proprieties aligned with high stiffness.

Process:

Blown Film Extrusion

Control Properties:

	ASTM Methods	Units	Values
Melt Flow Rate (190/2.16)	D 1238	g/10 min	2.2
Density	D 792	g/cm3	0.931

Typical Properties:

Blow Film Properties[a]

	ASTM Methods	Units	Values
Tensile Strength at Break (MD/TD)	D 882	MPa	20/15
Elongation at Break (MD/TD)	D 882	%	350/950
2% Secant Modulus (MD/TD)	D 882	MPa	190/170
Dart Drop Impact	D 1709	g/F50	100
Elmendorf Tear Strength (MD/TD)	D 1922	gF	-/350
Haze	D 1003	%	10
Gloss - Angle 45º	D 2457	-	70
Gloss - Angle 60º	D 2457	-	100

(MD = Machine Direction; TD = Transversal Direction)

(a) 40 µm thickness film, processed in a 50 mm blow film line with barrier screw. 25:1 L/D and a 1,0 mm die gap at a 2,3: 1 blow up ratio.

Recommended Processing Conditions:

Blow Film Extrusion

-Temperature Profile:.....from 150 to 180°C
-Mass Temperature:..... from 170 to 180°C
-Blow up Ratio:.....from 2,0 to 3,0:1
-Die Gap:.....1,0 mm

The optimum processing conditions will vary according to the type of equipment used and cannot be considered as performance guarantee.