Braskem

Data Sheet

Polypropylene Symbios 4102

Sub-group:
Terpolymer

Description:
Braskem Symbios 4102 is a medium melt flow rate terpolymer, designed for use as a heat sealing layer on biorented films (BOPP), with heat seal temperature below 120ºC on treated face. This product does not have slip and anti-blocking agents so it is indicated for customized formularization. This product is appropriate for metalizing processes.

Applications:
Coextrusion of bioriented and conventional film; heat sealable bioriented and conventional film; with a medium temperature of sealing and modifier of properties of conventional film. Also suitable for use in the lamination process.

Processing:
Bioriented Film (BOPP)
Film Coextrusion

Control Properties:

	ASTM Method	Units	Values
Melt Index (230°C/2,16 kg)	D 1238	g/10 min	5.5

Typical Properties[a]:

	ASTM Method	Units	Values
Density	D 792	g/cm³	0.902
Flexural Modulus	D 790	MPa	700
Tensile strength at yield	D 638	MPa	25
Elongation at yield	D 638	%	13
Rockwell Hardness (R Scale)	D 785	-	73
Notched Izod impact strength at 23°C	D 256	J/m	55
Notched Izod impact strength at -20°C	D 256	J/m	20
Heat deflection temperature at 1,820 MPa	D 648	°C	48
Heat deflection temperature at 0,455 MPa	D 648	°C	74
Vicat softening temperature at 10 N	D 1525	°C	121

a) Tests made in injection molded specimens according to ASTM D 4101.

Film Properties[b]:

	ASTM Method	Units	Values
Secant Modulus 1% (MD/TD)	D 882	MPa	395/395
Tensile Strength at Yield (MD/TD)	D 882	MPa	18/16
Elongation at Yield (MD/TD)	D 882	%	16/13
Haze	D 1003	%	0.4
Gloss 45°	D 2457	-	96
Sealing Initial Temperature	Braskem Method	ºC	99

b) 30 μm thickness film, processed in a 50 mm screw diameter extruder with blow up ratio of 1,3:1 (MD=Machine Direction and TD=Transversal Direction)