

# POLO TSY HGS

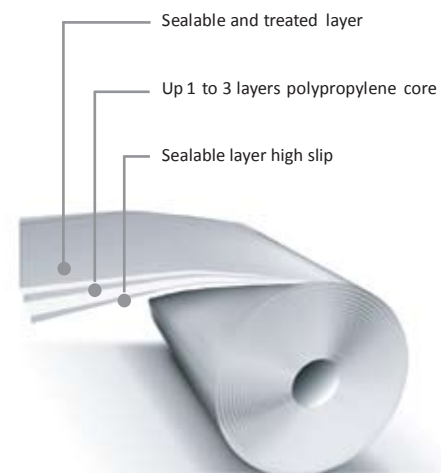
**Bi-oriented coex polypropylene film, two sides heat sealable, one side treated for printing and lamination high slip**

## MAIN CHARACTERISTICS

Two-side heat-sealable BOPP film with one side treated for printing usage both gravure and flexography techniques as well as lamination of high and excellent performance at VFFS and HFFS machines.

## APPLICATIONS

Printing and lamination packaging for biscuits, snacks, candies, pasta in general, cereal bars, chocolate and ice-cream.



Characteristics	Methodology	Unit	20 TSY HGS	25 TSY HGS	30 TSY HGS
Thickness	DIN 53370	gauge	80	100	120
		micron	20.0	25.0	30.0
Unit Weight	ASTM D 4321	lb/ream	11.1	13.9	16.7
		g/m <sup>2</sup>	18.1	22.6	27.2
Yield	ASTM D 4321	in <sup>2</sup> /lb	39000	31000	26000
		m <sup>2</sup> /kg	55.2	44.2	36.8
Tensile Strength	MD TD ASTM D 882	lb/in <sup>2</sup>	20300	20300	20300
		N/mm <sup>2</sup>	140	140	140
		lb/in <sup>2</sup>	30900	30900	30900
		N/mm <sup>2</sup>	240	240	240
Elongation at break	MD TD ASTM D 882	%	170	170	180
			50	50	60
Gloss (45°)	ASTM D 2457	-	90	90	90
Haze	ASTM D 1003	%	1.6	1.6	1.6
Sealing Range	Film/Film Untreated/Untreated ASTM F 88	°C	105 - 130	105 - 130	105 - 130
Sealing Strength	Film/Film Untreated/Untreated ASTM F 88	g/in	450	480	500
Shrinkage	MD TD ASTM D 1204	%	3	3	3
			1	1	1
COF	Film/Film Untreated/Untreated ASTM D 1894	-	0.20	0.20	0.20
Surface treatment	Internal External ASTM D 2578	Dynes/cm	Absent	Absent	Absent
			Min. 38	Min. 38	Min. 38
WVTR	73F/90%RH 38°C/90%RH ASTM F 1249	g H <sub>2</sub> O/(100 in <sup>2</sup> .24hs)	0.48	0.39	032
		g H <sub>2</sub> O/(m <sup>2</sup> .day)	7.5	6.0	5.0
OTR	73F/760 mm Hg 23°C / 1 atm ASTM D 3985	cc O <sub>2</sub> /(100 sq in <sup>2</sup> .24hs)	190	150	125
		cm <sup>3</sup> O <sub>2</sub> /(m <sup>2</sup> .day)	2900	2300	1900

## SUPPLY SPECIFICATIONS

Width	0/+2 mm or 0/+ 0.08 inches from standard width
Outside diameter	- 30 mm or 1.18 inches from standard diameter + 20 mm or 0.8 inches from standard diameter
Core	Core: 153 mm or 6.0 inches / 77 mm or 3.0 inches Tolerance: +1 mm or + 0.04 inches
Number of splice per reel	Maximum 2
Percentage of splices per order	Maximum 30%

"The restrained information in this catalog represent typical data, and does not constitute genuine warranty liability as far as the product process and or application. For new thicknesses or application, please consult a Polo Film's specialist".



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