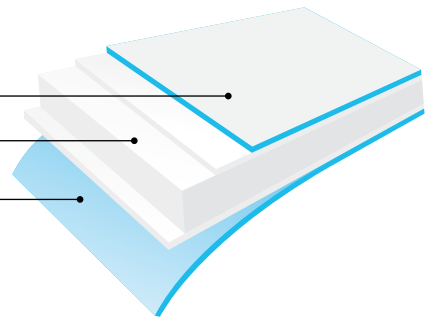


Treated layer
 Highly cavitated layer
 Untreated sealable layer



Technical Data Sheet

Bi-Orientated PolyPropylene Film (BOPP)

MIC

**33-38
microns**

**Ultra high yield,
cavitated white film**

Special Features

- Very high yield
- Consistent slip properties for superior machinability
- High optical density and light barrier

Typical Applications

Designed to be used as a mono web in heat or cold seal HFFS confectionery and ice cream packaging.

The untreated layer is suitable for heat and cold seal applications.

The untreated layer can be treated in line for cold seal adhesives designed for treated surfaces.

Properties	Unit	Typical Values		Method
Thickness	micron	33	38	Manucor - gravimetric
Unit weight	g/m ²	19.8	22.8	Manucor - gravimetric
Yield	m ² /kg	50.5	43.9	Manucor method
Surface tension	dynes/cm	38	38	ASTM D 2578
Optical density	-	0.6	0.6	Haze Gard Plus
Gloss (Treated)	%	100	100	ASTM D 2457 45°
White index	%	70	70	E313 - CIE
Opacity	%	83	85	Manucor - BYK
Whiteness (Berger)	%	70	70	Berger - BYK
COF Dyn F-F (U / U)	-	0.3	0.3	ASTM D 1894
COF Dyn F-F (T / T)	-	0.4	0.4	ASTM D 1894
Tensile strength at break (MD)	N/mm ²	80	80	ASTM D 882
Tensile strength at break (TD)	N/mm ²	135	135	ASTM D 882
Elongation at break (MD)	%	120	120	ASTM D 882
Elongation at break (TD)	%	40	40	ASTM D 882
Tensile modulus of elasticity (MD)	N/mm ²	1150	1150	ASTM D 882
Tensile modulus of elasticity (TD)	N/mm ²	2000	2000	ASTM D 882
Heat seal range (U)	°C	105-140	105-140	Manucor - 3 bar - 1"
Seal strength (U / U)	g/cm	140	170	Manucor - 130°C - 3 bar - 1"
Shrinkage (MD)	%	≤5	≤5	ASTM D 1204 120°C 5'
Shrinkage (DD)	%	≤3	≤3	ASTM D 1204 120°C 5'

Rev. Date 15/06/2018 - Please see our website www.manucor.com for the most updated version of this technical data sheet.

Disclaimer : Typical values describe useful product performance and are not intended for specification purposes.