



# SUPEX

## 2011

### Description

SUPEX 2011 is a transparent, coextruded, biaxially oriented polypropylene (BOPP) film. Both sides heat sealable. One side treated.

Lamination purpose packaging film for use on HFFS and VFFS packaging machines where the strong seals and excellent hot-tack is needed. It can be used as single ply and as lamination film to itself and to other substrates.

### Properties

- Broad seal range
- Excellent hot tack and heat seal strength
- Good hot slip
- Excellent dimensional stability
- High clarity and gloss
- Good moisture barrier
- Resistance to chemicals, greases and oils
- Excellent adhesion to inks, coatings and lamination adhesives
- Low static property
- The film shelf life is 12 months

## Technical Features

PROPERTIES	TEST METHOD	UNITS	2011									
			15	17	18	20	25	30	35	40	50	
THICKNESS	ASTM F2251	micron	15	17	18	20	25	30	35	40	50	
		Gauge	60	68	72	80	100	120	140	160	200	
YIELD	ASTM D4321	m <sup>2</sup> /kg	73,3	64,6	61,1	54,9	44,0	36,6	31,4	27,5	22,0	
		in <sup>2</sup> /Lbs	51.500	45.400	43.000	38.600	30.900	25.800	22.100	19.300	15.500	
UNIT WEIGHT	ASTM D4321	g/m <sup>2</sup>	13,7	15,5	16,4	18,2	22,8	27,3	31,9	36,4	45,5	
HAZE	ASTM D1003	%	1,7					2,0				
GLOSS (45 °)	ASTM D2457	%	92									
TENSILE STRENGTH AT BREAK	ASTM D882	MD	N/mm <sup>2</sup>	160								
			lb/in <sup>2</sup>	23.200								
		TD	N/mm <sup>2</sup>	280								
			lb/in <sup>2</sup>	40.600								
ELONGATION AT BREAK	ASTM D882	MD	185									
		TD	65									
THERMAL SHRINKAGE (120 °C, 5 min, air)	ASTM D1204	MD	3									
		TD	1									
COEFFICIENT OF FRICTION	ASTM D1894	Film/Film	0,30									
		Film/Metal	0,20									
SURFACE TENSION	ASTM D2578	Dyne/cm	Treated Side	38								
			Other Side	-								
HEATSEAL RANGE	ASTM F88	°C	105-145									
		°F	221-293									
HEATSEAL STRENGTH (120 °C, 1 MPa, 1 s)	ASTM F88	N/15mm	2,0									

### “Product Identification (Decision 97/129/EC): PP5”

#### Regulatory Status

Our product complies with the applicable EC legislation on packaging involving direct contact with foods except metallized films. Full details are given on the Regulatory Compliance Certificate and can be found on our web site.

The film can also be supplied with ISCC+ certified raw materials with the category of bio-circular feedstock under the product group of SUPRENEW and category of circular feedstock under the product group of SUPCYCLE. SUPRENEW and SUPCYCLE products are certified with “Mass Balance” chain of custody system under ISCC+ and due to chemical processing of the feedstock, there is no compromise & change on any specific feature of the film given in this TDS regardless of the sustainable content in the film. Therefore all product properties of this film covers the same product code with SUPRENEW or SUPCYCLE brand. Three digits will be added to the end of the ISCC+ certified product code. SUPRENEW products will be differentiated with Rxx (R will communicate that the film is circular xx code will communicate the sustainable content % of the film) and SUPCYCLE products will be differentiated with Pxx (P will communicate that the film is circular xx code will communicate the sustainable content % of the film). Further details of the sustainable content of the film will be given in the Sustainability Declaration (SD) prepared for each ISCC+ certified order.

The information contained in this data sheet is true and accurate according to current state of our knowledge and intended to give general information on our products and their applications. Above values are to be considered as guidelines and not as product specifications. Since the actual conditions of use are beyond our control, users are advised to make their own tests at their specific conditions of laboratory and/or actual use. We suggest our customers to determine final suitability for their specific end uses.

Also be advised that information on this data sheet shall not be construed as an inducement or recommendation to use any process or to manufacture or use any product in conflict with existing, pending or future patents.

For related spec sheet with tolerance values, please contact our sales departments

STANDARD ROLL DIMENSIONS			
CORE INNER DIAMETER (ID)	CORE OUTER DIAMETER (OD)	LENGTH TOLERANCE	WIDTH TOLERANCE
76 mm (3 in) & 152 mm (6 in)	530 mm & 790 mm *	± % 5 for ≤ 390 mm OD ± % 10 for > 390 mm OD	- 0 & + 4 mm

\* 790 mm OD is available for BOPP films above 350 mm width