



## Used for Pipe Markers

### PRODUCT DESCRIPTION

Our Pipe Marking substrate is an exceptionally white polyester film with a glossy satin finish and a pre-treatment on both surfaces to promote adhesion to many printing inks and industrial coatings. It can be used as a base for pressure sensitive labels, security printing and pre-paid cards, multiple tickets and other general printing applications.

### KEY FEATURES

- Superb printability with a wide range of inks
- Durable and long lasting
- Excellent thermal and dimensional stability
- Available in sheets and reels



## TECHNICAL DATA \*TD\* = Transverse direction, \*MD\* = Machine direction

PROPERTY		TEST METHOD	UNIT	VALUES							
GENERAL	Film thickness		micron	50	75	100	125	175	250	330	
	Area yield		m <sup>2</sup> /Kg	14.1	9.4	7.1	5.7	4.1	2.8	2.1	
	Unit weight		g/m <sup>2</sup>	71	106	140	175	245	355	481	
	Density	ASTM D1505	g/cc	1.39							
MECHANICAL	Tensile strength at break (minimum)	MD	Kg/mm <sup>2</sup>	14							
		TD		17							
	Stress at 5% strain (F5)	MD	ASTM D882-83 (230C, 50% rh, strain rate 50% min)	Kg/mm <sup>2</sup>	8						
		TD			8						
	Elongation at break	MD		%	120						
		TD			120						
Slip (co-efficient of static friction)		ASTM D1894-78 (modified)		0.4							
OPTICAL	Colour (D65 - 10°)		ASTM E313-79	L*=97.8 a* = 0.1 b* = -3.2							
	Gloss		ASTM D2457-90 (Gardner 60°C)	%							
	Total light transmittance (maximum)		ASTM D1003-77 (Gardner Hazemeter)	17	13	8	6	4	2	1	
THERMAL	Upper melt temperature		ASTM E794-85	°C							
	Coefficient of thermal expansion (between 20 and 50°C)	MD	cm/cm°C	255 to 260							
		TD		19 x 10 <sup>6</sup>							
	Shrinkage (175 micron film)	MD	5 mins at 190°C	%	13 x 10 <sup>6</sup>						
TD		3									
				1							

