

COLOUR CODED PLASTIC ‘POLYMEX’

Material Specification ‘A’

This specification applies to thickness from .001" to .015" as detailed and are produced colour coded from polyester films (‘Melinex’, ‘Mylar’, ‘Hostaphan’) to meet the particular demands of the engineering, automotive, electrical, electronic industries. Polyester materials are remarkably tough with very high compressive and dielectric strengths, very low water absorption, excellent dimensional stability over a wide range of temperatures and good resistance to most chemicals, ozone, direct sunlight etc.

THICKNESS & COLOUR

(23mic) .001"	Purple	(75mic) .003"	Green	(175mic) .007"	Peacock Blue
(36mic) .0015"	Pink	(100mic) .004"	Amber	(190mic) .0075"	Hazy
(50mic) .002"	Dark Blue	(125mic) .005"	Brown	(200mic) .008"	Tint Blue **
(65mic) .0025"	Black	(150mic) .006"	Clear	(225mic) .009"	Silver
(250mic) .010"	White	(350mic) .014"	Natural	(275mic) .011"	Gold
(375mic) .015"	Red (MX)	(300mic) .012"	Dark Green		

Thicker gauges (Matt Red .015" to .060") Please see material specification sheet ‘B’

** .008"(200mic) is a Polyester laminate, and may perform differently in some applications.

TYPICAL VALUE of PROPERTIES

<u>PROPERTY</u>	<u>VALUES</u>	<u>TEST METHOD</u>
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GENERAL:

Relative density	1.40 kg/m ²	ASTM D 1505
Water absorption	0.60 % (1 week 24°C)	

MECHANICAL:

	MD*	TD*	
Tensile Strength	2000kgf/cm ²	2600 kgf/cm ²	ASTM D 882
Yield strength	1000kgf/cm ²	1000 kgf/cm ²	ASTM D 882
Elongation at break	125 %	80 %	ASTM D 882
Ultimate compressive strength	28500 psi (250A)		ASTM D 695-63T

ELECTRICAL: Dielectric strength 6.4kv (23m) 16kv (125m) 23kv (250m) ASTM D 149
Surface resistivity > 10¹³ Ω/□

THERMAL:

Service temperature	- 70°C to 130°C
Melting point	265°C
Co-efficient of thermal Expansion (Between 20° & 50°C)	19 × 10 ⁻⁶ (MD*) cm/cm/deg/c
Shrinkage (After 5 mins @ 190°C)	19 × 10 ⁻⁶ (TD*) cm/cm/deg/c
	3 % (MD* & TD*)

Resistant to:

Dilute acids and alkalis / grease / oils / fats / organic / solvents / alcohols / hydrocarbons / ketones / esters / chlorinated compounds.

The above properties are typical and no warranty is given or is to be implied with respect to this information.

*MD - Machine direction *TD - Transverse direction



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