



MATERIAL SPECIFICATION SHEET: Plastic Shim

Colour coded plastic shim stock specification for thicknesses ranging from 0.001" (0.025mm) Thick to 0.35" (0.35mm) Thick

Colour		Thickness mm	Thickness Inches	Sheet Size
Polyester				
PURPLE		0.025	0.0010	1220mm x 610mm
PINK		0.037	0.0015	1220mm x 610mm
DARK BLUE		0.050	0.0020	1220mm x 610mm
BLACK		0.063	0.0025	1220mm x 610mm
GREEN		0.075	0.0030	1220mm x 610mm
AMBER		0.100	0.0040	1220mm x 610mm
BROWN		0.125	0.0050	1220mm x 610mm
CLEAR		0.150	0.0060	1220mm x 610mm
PEACOCK BLUE		0.175	0.0070	1220mm x 610mm
HAZY		0.190	0.0075	1220mm x 610mm
TINT BLUE		0.200	0.0080	1220mm x 610mm
SILVER		0.225	0.0090	1220mm x 610mm
WHITE		0.250	0.0100	1000mm x 915mm
GOLD		0.275	0.0110	1100mm x 650mm
DARK GREEN		0.300	0.0120	1100mm x 650mm
Polypropylene				
NATURAL		0.350	0.0140	1000mm x 940mm
RED		0.375	0.0150	650mm x 1100mm
YELLOW		0.500	0.0200	650mm x 1100mm
LIGHT GREY		0.625	0.0250	650mm x 1100mm
LIGHT BLUE		0.750	0.0300	650mm x 1100mm
TAN		1.000	0.0400	650mm x 1100mm
CHARCOAL GREY		1.250	0.0500	650mm x 1100mm
CREAM		1.500	0.0600	650mm x 1100mm

The company's products are used for a multiplicity of purposes and as the company has no control over the method of their applications or use, the company excludes all conditions or warranties, expressed or implied by statute or otherwise, as to their products and/or their fitness for any particular purpose. Any technical co-operation between the company and the customer is given for customers assistance only and without liability on the part of the company

Colour-coded Plastic Shim stock Specification For Thicknesses Ranging From 0.001" (0.025mm) THK to 0.014" (0.35mm) THK

Typical Value Properties

Property		Values	Test Method
General:			
Relative Density		1.4Kg/m ²	ASTM D 1505
Water absorption		0.60%(1 week 23oc)	
Mechanical	MD	TD	
Tensile Strength	2000Kgf/cm ²	2600Kgf/cm ²	ASTM D 882
Yield Strength	1000 Kgf/cm ²	1000Kgf/cm ²	ASTM D 882
Elongation at break	125%	80%	ASTM D 882
Ultimate Compressive Strength		28500psi (250A)	ASTM D 695-63 T
Electrical			
Dielectric Strength	6.4Kv(23mic) 16Kv(125mic)	23Kv (250mic)	ASTM D 149
Surface Resistivity	>10 ¹³ ohn/		
Thermal			
Service Temperature		-70c to +130c	
Melting Point		265c	
Co-efficient of thermal		19 x 10 (MD*) cm/cm/deg/c	
Expansion (between 20oc & 50 oc)		19 x 10 (TD*) cm/cm/deg/c	
Shrinkage (after 5 mins @190 oc)		3% (MD* and TD*)	
Chemical			
Resistant to: Dilute acids and alkalis, greases, oils, fats, organic solvents, alcohols, hydrocarbons, ketones, esters & chlorinated compounds			

*MD – machine direction TD – transverse direction

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Colour-coded Plastic Shimstock Specification For Thicknesses Ranging Form 0.015" (0.038mm) THK to 0.125" (3.00mm) THK

'RED AND THICKER'

Typical Value Properties

<u>Property</u>	<u>Values</u>	<u>Test Method</u>
Tensile strength at yield	3560 lbf/in ²	BS 2782 301G
Ultimate compressive strength	4000-8000 psi	-
Elastic modules in tension	200,000 lbf/in ²	ASTM D790 59T
Izod impact strength (1.0mm notch)	8ft. lbf/in notch 430 J/M notch	BS 2782 306A
Brittle failures	None	
Brinell hardness	9.5	BS240
Softening point	144c	BS 2782 102D
Co-efficient of linear expansion	11 x 10 ⁵ per deg C	
Surface resistivity	>10 ¹⁵ ohm	BS 2782 203 A
Volume resistivity	>10 ¹⁵ ohm cm	BS 2782 202 A
Electric strength		BS 2782 206 B
Specific Gravity	0.91 to 0.95	
Water absorption	0.3mg (<0.02%)	BS 2782 502 D

Resistant to: Polypropylene sheet is resistant to aqueous solutions of non-oxidizing or inorganic compounds, most Alcohols, ketones and mineral oils. It is however, affected by concentrated solutions of oxidizing Agents, ethers, esters, and chlorinated hydrocarbons, some aromatic compounds, petrol and paraffin.

*MD – machine direction TD – transverse direction