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**EXCEL INTEGRAL (IF) PVC FREE FOAM SHEET ASTM REFERENCE SHEET**

Excel **IF** PVC Free Foam Sheet is free from lead, cadmium, barium and other heavy metals.

PROPERTY	TEST	UNIT	VALUE
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**PHYSICAL**

Density	ASTM D 1505	g/cc	0.50-0.60
Hardness	ASTM D 2240	Shore 'D'	>40
Water Absorption	ASTM D570	%	< 1.0

**MECHANICAL**

Tensile Strength	ASTM D 638	Psi	> 1595
Elongation	ASTM D 638	%	>10
E-Modulus	ASTM D 638	Psi	130000-220000
Flexural Strength	ASTM D 790	Psi	>4350
Izod Impact Strength	ASTM D 790	Psi	>9
Charpy Impact Strength	DIN 53253	KJ/M <sup>2</sup>	>10
Compressive Strength at 10% Deformation	ASTM D 695	Psi	>435
Screw hold (typical for 25mm sheet)	ASTM D 1761	lbs/inch	>265

**THERMAL**

Vicat (B/50)	ASTM D 1525	°F	>160
Coefficient of Linear Thermal Expansion	ASTM D 696	°C <sup>-1</sup>	5.56X10 <sup>-5</sup>
Thermal Conductivity	ASTM C 177	W/m K	0.1
Heat Deflection Temp @ 1.8 MPa	ASTM D 648	°F	~ 140
Rate of Heat Transfer	DIN 52616	W/m <sup>2</sup> k	3.0 for 10mm 2.0 for 19mm
Burning Rate	ASTM D 635	In/min	No burn when flame removed

## ELECTRICAL

Surface Resistivity	ASTM D 257	$\Omega$	$>10^{14}$
Volume Resistivity	ASTM D 257	$\Omega$ -cm	$>10^{15}$
Dielectric Constant	ASTM D 150	-	1.7

## FLAMMABILITY

Country: UK	BS476; Part 7	-	Class 1
Country: USA	UL 94		94 V-0; 94 5-V
Country: France	NFP 92-501		M1

## STANDARD DIMENSIONS AND COLOR

Color	Cap Layer White J 1054
Thickness	8, 10, 13, 19, 25, 30 mm
Width	1000, 1220, 1250, & 1560 mm 1560 width is only available up to 19mm
Length	2000, 2440, 2500 & 3000, 4880 & 5490 mm
Flatness	8mm per meter for 8 & 10 mm. Above 10mm – 3mm per meter

\*Special color, lengths and widths as per customer request

## TOLERANCE ON DIMENSIONS

Length	-0, +10 mm
Width	-0, +5 mm
Thickness	$\pm(0.1 + 0.05 \times S)$ Where S = thickness of the sheet

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