

**EX-CEL**<sup>®</sup>



Plastic Sheet



Let's Build a Strong & Colourful Future...Together !!

### MAIN FEATURES

- Easy to Fabricate • Light Weight • Outstanding Printability
- Fine Cell Structure •Low Flammability
- Non Warping •Non Corrosive •Non Toxic •High Impact Strength

### SUITABLE FOR

- Cut •Saw •Shear •Punch •Drill •Mill
- Rivet •Screw •Paint •Print
- Photo Mount •Bend •Engrave

### APPLICATIONS

- Advertising Signs •Displays •Exhibition Stands •Point of sale
- Interior Designs •Bathroom Fittings •Models & Prototypes
- Panels & Cabins •Embossing & Engraving •Thermoforming
- Lumber •Trimboard

### PRODUCT RANGE

Code	Colour	Thickness	Std. Width		Std. Length	
			mm	inch	mm	inch
J1018	Bright White	2 to 10mm	1000	39	2000	79
			1220	48	2440	96
			1560	61	3050	120
			2050	80	3050	120
		12 to 25mm*	1220	48	2440	96
					3050	120
					4880	192
				5490	216	
				6100	240	

\*One side embossed pattern also available.

### TECHNICAL PROPERTIES

Properties	Test	Unit	Value
<b>Physical:</b>			
Density	DIN 53479	g/cc	0.55 - 0.70
Hardness	DIN 53505	Shore 'D'	≥ 42
Water Absorption	DIN 53495	%	£ 1.0
<b>Mechanical:</b>			
Tensile Strength	DIN 53455	MPa	≥ 15
Elongation at Break**	DIN 53455	%	≥ 15
Modulus of Elasticity	DIN 53457	MPa	900 -1500
Izod Impact Strength*	ASTM D256	KJ/M <sup>2</sup>	≥ 9.0
<b>Electrical:</b>			
Dielectric strength	DIN 53481	KV/cm	≥ 90
<b>Thermal:</b>			
Vicat Softening Temperature	DIN 53460	°C	≥ 73
Coefficient of linear Expansion	DIN 53752	mm/m°C	0.08
Thermal Conductivity	DIN 52616	W/mK	0.05-0.07
<b>Flammability :</b>			
UK	BS 476 Part		Class 1 Y
France	NFP 92-501		Class M1
USA	UL 94		V0

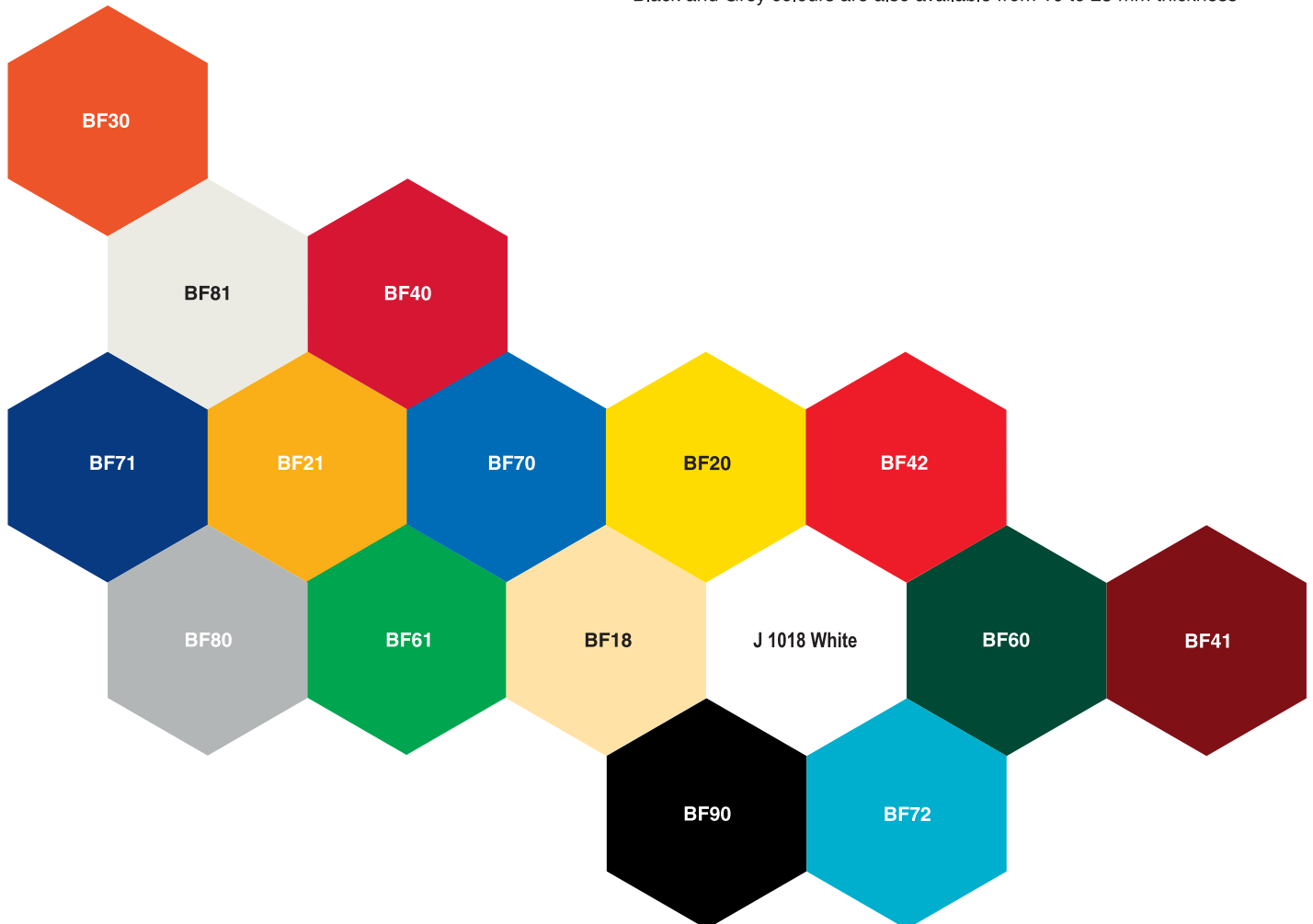
\* Applicable for thickness range of 3 to 10 mm only.

\*\* Applicable For White Sheet

(The colour shades are only representative)

Colours are available in 3, 5 & 6 mm thickness

Black and Grey colours are also available from 10 to 25 mm thickness





### MAIN FEATURES

- Easy to Fabricate •Light Weight •Outstanding Printability
- Fine Cell Structure
- Firm Outer Skin •Low Flammability
- Good Sound & Thermal Insulation
- Self Extinguishing •Non Corrosive •Non Toxic
- Smooth & Semi gloss
- High Impact Strength •Resistance to Oscillation & Vibration

### SUITABLE FOR

- Cut •Saw •Shear •Punch •Drill •Nail •Mill •Rivet •Screw
- Paint •Print •Photo Mount •Emboss •Engrave

### APPLICATIONS

- Advertising Signs •Displays •Exhibition Stands •Interior Designs
- False Ceilings •Walls and Partitions •Door Constructions
- Window Shutters •Office Accessories •Bathroom Fittings
- Models & Prototypes •Panels & Cabins •Embossing & Engraving
- Point of sale

### PRODUCT RANGE

Code	Colour	Thickness	Std.Width		Std.Length	
			mm	inch	mm	inch
J1054	White	10 to 30mm	1250	49	2000	79
			1220	48	2440	96
					3050	120
					2440	96
					4880	192
					5490	216
					6100	240

\*Customised lengths available as per customer request.

### TECHNICAL PROPERTIES

Properties	Test	Unit	Value
<b>Physical:</b>			
Density	DIN 53479	g/cc0.	50 to 0.60
Hardness	DIN 53505	Shore'D'	55
<b>Mechanical:</b>			
Tensile Strength	DIN 53455	MPa	≥ 11
Elongation at Break	DIN 53455	%	≥ 10
Charpy Impact Strength	53253	KJ/M <sup>2</sup>	≥ 15
<b>Thermal:</b>			
Vicat Softening Temperature	DIN 53460	°C	75
<b>Flammability:</b>			
UK	BS 476Part7		Class 1 Y
France	NFP 92-501		Class M1
USA	UL 94		V0



### MAIN FEATURES

- Smooth & Gloss •Easy to Fabricate •Good Printability
- Fine Cell Structure •Low Flammability •Non Corrosive
- Non Toxic •High Impact Strength •Good Sound & Thermal Insulation •Self Extinguishing •Resistance to Oscillation & Vibration.

### SUITABLE FOR

- Cut •Saw •Shear •Punch •Drill •Bend •Mill •Rivet •Weld •Paint
- Print
- Photo Mount •Emboss •Engrave •Thermoform

### APPLICATIONS

- Advertising Signs •Displays •Walls and Partitions •Bathroom Fittings •Models & Prototypes •Panels & Cabin •Embossing & Engraving •Point of sale •Switch Board •Ventilation Duct

### PRODUCT RANGE

Code	Colour	Thickness	Std. Width		Std. Length	
			mm	inch	mm	inch
J7011 } J7010 }	Grey	2 to 12.7mm	1000	39	2000	79
			1220	48	2440	96
			1500	59	3050	120
J7016	White					

\* Special lengths & Widths as per customer's request.

### TECHNICAL PROPERTIES

Properties	Test	Unit	Value
<b>Physical:</b>			
Density	DIN53479	g/cc	1.42-1.46
Hardness	DIN53505	Shore 'D'	80
Water Absorption	DIN53490	%	0.1
<b>Mechanical:</b>			
Tensile Strength	DIN53455	MPa	≥ 45
Elongation	DIN53455	%	≥ 60
E Modulus	DIN53457	MPa	≥ 3000
Charpy impact strength	DIN 53253	KJ/m <sup>2</sup>	≥ 7.5
<b>Thermal:</b>			
Vicat (B/50)	DIN53460	°C	80
Coefficient of linear Thermal Expansion	ASTM D 696	°C <sup>-1</sup>	7.07x10 <sup>-5</sup>
<b>Electrical:</b>			
Surface Resistivity	ASTM D 257	W	2.8x10 <sup>16</sup>
Volume Resistivity	ASTM D 257	W-cm	8.1x10 <sup>15</sup>
Dielectric Constant at 1MHZ	ASTM D 150	----	3.13
Dielectric Strength	DIN IEC 243	KV/mm	16.8
Dimensional Change at 120±2°C	BS 3757	%	≤ 15
<b>Flammability:</b>			
UK	BS 476 Part 7		Class 1 Y
USA	UL 94		V0



### MAIN FEATURES

- Manufactured under close tolerances
- Each Sheet individually inspected
- Hard and Smooth Surface
- Light weight
- Excellent Printability

### APPLICATIONS

- Signs
- Point of Purchase

The ultimate PVC foam sheet for digital printing. Excel Pro is a sheet exclusively developed for the high end digital print applications. The sheets are produced under very close dimensional tolerances. With Excel Pro you are able to achieve a sharp and high quality printed image.

### PRODUCT RANGE

Code	Colour	Thickness	Std. Width		Std. Length	
			mm	inch	mm	inch
J1018	Bright White	3 to 10mm	1220	48	2440	96

### TECHNICAL PROPERTIES

Properties	Test	Unit	Value
<b>Physical:</b>			
Density	DIN 5347	g/cc	0.55 - 0.70
Hardness	DIN 53505	Shore 'D'	> 42
Water Absorption	DIN 53495	%	≤ 1.0
<b>Mechanical:</b>			
Tensile Strength	DIN 53455	MPa	> 15
Elongation at Break	DIN 53455	%	≥ 15
Modulus of Elasticity	DIN 53457	MPa	900 -1500
Izod Impact Strength	ASTM D256	KJ/M <sup>2</sup>	> 9.0
<b>Electrical:</b>			
Dielectric strength	DIN 53481	KV/cm	> 90
<b>Thermal:</b>			
Vicat Softening Temperature	DIN 53460	°C	> 73
Coefficient of linear Expansion	DIN 53752	mm/m°C	0.08
Thermal Conductivity	DIN 52616	W/mK	0.05-0.07
<b>Flammability :</b>			
UK	BS 476 Part 7		Class 1Y
France	NFP 92-501		Class M1
USA	UL 94		V0



### MAIN FEATURES

- High Gloss level •Easy to Fabricate •Light Weight
- Outstanding Printability •Fine Cell Structure
- Firm Outer Skin •Low Flammability •Self Extinguishing
- Good Sound & Thermal Insulation
- Non Corrosive •Non Toxic •High Impact Strength
- High Resistance to Oscillation & Vibration.

### SUITABLE FOR

- Cut •Saw •Shear •Punch •Drill
- Mill •Rivet •Weld •Paint •Print
- Photo Mount •Emboss •Engrave

### APPLICATIONS

- Advertising Signs •Displays •Walls and Partitions
- Bathroom Fittings •Models & Prototypes •Panels & Cabin
- Embossing & Engraving •Point of sale

### TECHNICAL PROPERTIES

Properties	Test	Unit	Value
<b>Physical:</b>			
Density	DIN53479	g/cc	0.60
Hardness	DIN53505	Shore'D'	≥ 55
<b>Mechanical:</b>			
Tensile Strength	DIN53455	MPa	≥ 15
Elongation at Break	DIN53455	%	≥ 8
Dart Impact Strength	ISO179	J	≥ 10
<b>Thermal:</b>			
Vicat Softening Temperature	DIN53460	°C	≥ 72

### PRODUCT RANGE

Code	Colour	Thickness	Std. Width		Std. Length	
			mm	inch	mm	inch
J1021	White	3 to 10mm	1220	48	2000	79
					2440	96
					3050	120

Our technical advice on the uses of our material is given without obligation. The buyer is responsible for the application and processing of our products and is also liable for observing any third party rights. Technical data concerning our products are typical values. Subject to alteration. ®=reg, trademark

\* Special lengths & Widths as per customer's request.

Excel PVC sheet are Lead free & Cadmium free.  
This makes Excel Sheets an environment friendly product.



Accelerated Weathering Test



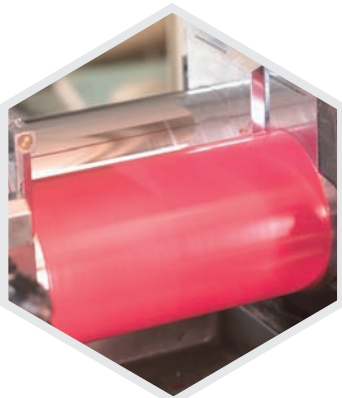
Mechanical Properties Testing



Rheological Study



UL Flammability Test



Colour Shade Development



Colour Spectrometer



Vicat & Heat Deflection Temperature test



PVC Sheet Plant

## The Company

Jain Irrigation Systems Ltd. today is one of the largest polymer processors in India of PVC, PE, PP, PS along with engineering polymers like Polycarbonate, Polyacetal, Polyimide, PBT, ABC, etc totaling to over 100,000 M.T.s are being extruded or injection moulded every year.

We produce and export a complete range of Micro Irrigation Systems with its components, PVC, PE Piping Systems and fittings, PVC and Polycarbonate Sheets, Processed Foods and Dehydrated Vegetables, to more than 50 countries worldwide.



Excel Sheets, a registered brand in the world market since 1990 is manufactured by Jain Irrigation Systems Limited in their state of the art facility at Jalgaon, India. JAINS are today, the only manufacturer of PVC and Polycarbonate Sheets under one roof in South East

Asia. The manufacturing facility is ISO 9001:2000 certified by RWTUV Germany.

Our products are specially formulated at our well equipped in-house R & D facility. This R&D facility is also used for perfecting new product development

JAINS have come a long way since 1978 having received 3 International awards, 91 National awards and 33 state awards for outstanding performance in exports, R & D, Fair Business Practices, Entrepreneurship, etc.



and new applications coming up from interaction with our customers and end users. Superior quality with prompt customer service, has assured JAINS a committed customer support in the global markets since the last 26 years.



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