

**TECHNICAL DATA SHEET**



Multilayer **Backlit**  
opal diffuser

Item	Description	Specification
<b>Multilayer Composite Structure</b>	<b>Article Codes</b>	PY-BL2130-07 / PY-BL2130-12 / PY-BL2130-52
	<b>Type of Resin</b>	Biaxial-oriented Polyester (BO-PET)
	<b>Colour</b>	opal diffuser (designed for lamination)
	<b>Printing Surface Finish</b>	Matt finish: gloss value 30 ÷ 35 (ASTM D 523)
	<b>Total Thickness</b>	215 micron
	<b>Total Weight / sqm</b>	300 gsm

Properties	Test methods	Unit	Value	
<b>General</b>				
Relative Density (at 23°C)	ASTM D1505-79	/	1.4	
<b>Mechanical</b>				
Tensile Strength at break	ASTM D882 (50% Strain Rate)	kgf/mm <sup>2</sup>	20 <b>MD</b> (Machine Direction)	26 <b>TD</b> (Transverse Direction)
F5 (5% elongation)	ASTM D882 (50% Strain Rate)	kgf/mm <sup>2</sup>	10 <b>MD</b> (Machine Direction)	10 <b>TD</b> (Transverse Direction)
<b>Thermal</b>				
HDT (Heat Distorsion Temperature)	ASTM E794-85	°C	160 ÷ 170	
Coefficient of thermal expansion between 20 and 50°C	/	cm/cm/°C cm/cm/°C	19*10 <sup>-5</sup> (MD - Machine Direction) 19*10 <sup>-5</sup> (TD - Transverse Direction)	
Shrinkage (after 5 mins at 190°C)	Internal Method	%	3 (MD - Machine Direction) 1 (TD - Transverse Direction)	

<b>Applications</b>	Indoor /outdoor applications for display, graphics and light boxes advertising. Outdoor applications suitable for max. 24 months. Lamination after printing is subjected.
<b>Advantages</b>	High tensile strength of the composite, high flatness and stability, good printability, up to 1440 dpi.
<b>Printability</b>	One side printing, front layer only. Suitable for Digital and Silk Screen Printing. Suitable for solvent, eco-solvent, UV inks and Latex. All tests are made with the original printer manufacturer's inks on the following equipments: Roland, Mimaki, Scitex, Mutoh and HP. Notes: due to the wide number of ink producers and Digital Printing machines, weather conditions and printing variability, testing before printing is recommended. Furthermore we recommend the maximum cleaning of the platen, to avoid scratches on the back.
<b>Storage Period</b>	24 months under ordinary condition at the average temperature of 22°C (min. 12°C , max. 32°C ) and relative humidity of 45-65%.
<b>Safety Caution</b>	RoHS - The multilayer PET film is in accordance with RoHS directive 2002/95/EC and its amendment directives. EN71 - The multilayer PET film is in accordance with the European Standard on Safety of Toys EN71 Part 3 and with the American Society for Testing and Materials - ASTM F963-07. REACH - The multilayer PET film is in accordance with current norms. For further information, please ask for the updated regulation on SVHC (Substances of Very High Concern) taken into consideration by REACH (Registration Evaluation Authorization of Chemicals), complying with the Italian Decree-Law nbr. 133 issued on 14.09.2009 published on the Italian Gazzetta Ufficiale.
<b>Notes</b>	Published information is based upon research and information which the Company believes to be reliable although such information does not constitute a warranty. Because of the variety of uses of the products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. The seller shall not be liable for damages in excess of the purchase price of the product nor for incidental or consequential damages. All specifications are subject to changes without prior notice.