

PHOTOVOLTAIC

Totally transparent

BACKSHEET FOR PV MODULE PROTECTION

Completely transparent laminate based on two layers of high performance polyester film. Particularly indicated for BIPV (Building Integrated Photovoltaics) such as greenhouses, parking areas etc. Thanks to its excellent resistance to the atmospheric agents, its strong barrier to oxygen and humidity, the high voltage insulation and the long term resistance to the hydrolysis of adhesives, dyMat ClrPYE® is properly indicated for solar cell module encapsulation. The Cell side is treated with a special thick primer which provides extremely high bonding to EVA. Primer and Pet are in transparent finishing. The laminate thickness has been designed to provide the best combination of properties in terms of electrical insulation and weatherability.

	Unit	Method	Value
PET thickness, air side, transparent	micron	caliper	50
PET thickness, inner layer, transparent	micron	caliper	125
Primer thickness	micron	caliper	100
UV protective coating	micron	caliper	5
Laminate thickness	micron	caliper	302 +/- 5%
Unit weight	gr/sqm	10x10 weight	361 +/- 5%
Tensile strength (MD)	N/10 mm	ASTM D-882	342
Tensile strength (TD)	N/10 mm	ASTM D-882	424
Elongation at break (MD)	%	ASTM D-882	154
Elongation at break (TD)	%	ASTM D-882	119
Heat shrinkage (MD) 150°C x 30'	%	ASTM D-1204	< 1,5
Heat shrinkage (TD) 150°C x 30'	%	ASTM D-1204	< 0,6
Layer peel strength	N/10 mm	T - peel (peak value)	> 5,0
EVA adhesion** (primer coated side vs EVA)	N/10 mm	internal	> 40,0
Moisture barrier (at 38° 90% RH)	gr/sqm x day	ASTM F-1249	2,40
Breakdown voltage	kV	ASTM D-149	> 20
Partial discharge test	VDC	IEC 60664-1	> 1000
Total Light Transmission	%	ASTM D-1003	> 87
	%	ASTM D-1003	< 17

Legend

*EVA Corona treated available upon request (adhesion typically > 80N/10mm)

Notes

Other thicknesses on request

Cut sheets (sizes, drills etc.) according to customer's specifications

Shelf life: 2 years

All values stated are to be considered as Typical values.

The above information is liable to change due to innovation and improvement in the manufacturing process.

We assume no liability for any infringement of any patent, copyright or design on the part of the customer while exploiting the film for different end-uses.

dyMat ClrPYE® is TÜV certified
and UL recognized (UL file n° E313506)

Coveme is UNI EN ISO 9001-2008

and ISO 14001 certified

The polyester film employed in the manufacturing
of dyMat ClrPYE® is completely recycable

dyMat ClrPYE® is a Coveme registered trademark



Date of revision: July 2012