

## SOLAR PANEL (EVA) ENCAPSULANT SHEET

'EVO' encapsulant sheets are UV, weather stable and ultra-fast cure EVA PV Encapsulant that can be used for all kinds of PV Solar modules.

PROPERTY	UNITS	TEST METHOD	TYPICAL TEST VALUES	
Film Grade	-	-	EVO FCP HLT	EVO FCP UVB
Emboss Type	-	Visual	Orange-Peel	Orange-Peel
Thickness	mm	ASTM D6988	0.65±5%	0.6±5%
Width	mm	Scale	specified +5/-0	specified +5/-0
Yield	Grams/sq. m	-	520 +/- 5%	480 +/-5%
Shore Hardness	Shore A	ASTM D2240	70 TO 80	70 TO 80
Tensile strength	MPa	ASTM D638	>10	>10
Tensile strain	%	ASTM D638	>500	>500
Adhesion to glass	N/cm	ASTM D903	>70	-
Adhesion to back sheet	N/cm	ASTM D903	-	>70
Water absorption	%	ISO 62-200805	<0.1	<0.1
Gel content	%	Soxhlet method	>75	>75
Thermal shrinkage (MD)	%	160C on glass plate for 5 min.	<2	<2
Thermal shrinkage (TD)	%	160C on glass plate for 5 min.	<1	<1
Optical transmittance	%	ASTM E424	>91	>91
Transmittance in Ultraviolet range 290 to 380 nm	%	ASTM E424	>80	<30
UV cut off wavelength	nm	ASTM E424	-	360
Comparative Tracking Index	volts	IEC 60112:2003	>600	>600
Di electric strength	kV/mm	ASTM D149	>28	>28
Volume resistivity	Ohm.cm	ASTM D257	>1x10 <sup>15</sup>	>1x10 <sup>15</sup>
<b>Lamination Parameters</b>				
Evacuation Time	Minutes	-	4 to 5	4 to 5
Lamination Time	Minutes	-	7 to 9	7 to 9
Temperature (Single Stage)	°C	-	140 to 145	140 to 145
Temperature (Double Stage)	°C	-	145 to 150	145 to 150
<b>Storage and Packing Details</b>				
Storage Conditions	Store in sealed packing at temperature < 30°C & humidity < 60%			
Shelf Life	Recommended to use within 9 months from the date of manufacture			
Packing	Length/roll: 150 meters Each roll is wrapped with a protective film in a corrugated box			

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