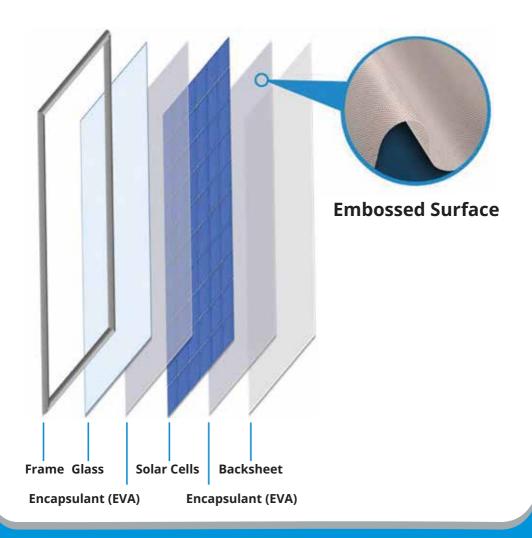
## **CONSERV P - 14 FC**

#### **EVA Encapsulant**





'CONSERV P 360-14 FC' is a wide process window curable, UV stable and weather stable Ethyl Vinyl Acetate (EVA) PV Encapsulant proven for single stage as well as short cycle multi stage lamination processes. This Encapsulant can be used for all Crystalline and many Thin - Film PV Modules. It has standard UV cut off wavelength.

'CONSERV P UVT - 14 FC' is a wide process window curable, UV and weather stable UV transparent Ethyl Vinyl Acetate (EVA) PV Encapsulant used as top layer towards the glass for all Crystalline PV Modules. It allows PV Modules comprising blue light sensitive PV Cells of a given efficiency to generate higher power

UL Certified. Refer File No. E353124

# **CONSERV P- 14 FC**

### **EVA Encapsulant**



#### **PROPERTIES - CONSERV P 360 - 14 FC**

Particulars	Test Method	Unit	Values	
Thickness	ASTM D 6988 - 21	mm	Value ±10%	
Grammange	ASTM D 646	g/m²	Value ±5%	
Width	Scale	mm	Up to 1500±5	
Melting Point	ISO 11357 - 3	°C	70±5	
Surface type	Visual	Unit	Orange Peel \ Pyramind \ Textile	
Tensile Strength	ASTM D 882-18	MPa	15±4	
Tensile Strain	ASTM D 882-18	%	≥600	
Shore Hardness	ASTM D 2240	Shore - A	65±5	
Water Absorption	ISO 62 - 2008-05	%	≤ 0.1	
Adhesion to Glass	ASTM D 903-2017	N/cm	≥100	
Adhesion to Backsheet	ASTM D 903-2017	N/cm	≥100	
Thermal Shrinkage	ISO 11501-1995	%	MD <3, TD <1	
Optical Transmittance	IEC 62788-1-4	%	≥91	
UV Cut Off Wavelength	IEC 62788-1-4	nm	360±30	
Refractive Index	ISO 489		1.48±0.05	
Dielectric Strength	ASTM D149	kV/mm	≥25	
Volume Resistivity	IEC 62788-1-2	Ohm.cm	≥1x10 <sup>15</sup>	
Gel Content	IEC 62788-1-6	%	≥75	
Lamination Parameters	Single Stage	Double Sta	ge (Stage 1) Double Stage (Stage 2)	
Evacuation Time (Minute)#	4 - 7	4 - 6		
Lamination Time (Minute)	7 - 10	2 - 4	6 - 9	
Temperature (°C)*	145 - 155	135 - 155		

<sup>•</sup> Temperature and #Vacuum to be uniformly maintained across the laminator chamber. #Periodic calibration of the machine input parameters to be done by Machine user.

<sup>•</sup> Lamination parameters change with increased width of Encapsulant/Module and/or increased thickness of Encapsulant and the same has to be re-tuned to arrive at acceptable results.

<sup>•</sup> Storage Condition and Shelf Life: Store in undamaged original packaging, temperature between 20° C to 30° C and relative humidity < 60%. Recommended use within 9 months from date of manufacture

<sup>•</sup> It is recommended to use; after opening the package within 8 hours.

## **CONSERV P - 14 FC**

## **EVA Encapsulant**



#### **PROPERTIES - CONSERV P UVT - 14 FC**

Particulars	Test Method	Unit	Values		
Thickness	ASTM D 6988 - 21	mm	Value ±10%		
Grammange	ASTM D 646	g/m²	Value ±5%		
Width	Scale	mm	Up to 1500±5		
Melting Point	ISO 11357 - 3	°C	70±5		
Surface type	Visual	Unit	Orange Peel \ Pyramind \ Textile		
Tensile Strength	ASTM D 882-18	MPa	15±4		
Tensile Strain	ASTM D 882-18	%	≥600		
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Water Absorption	ISO 62 - 2008-05	%	≤ 0.1		
Adhesion to Glass	ASTM D 903-2017	N/cm	≥100		
Adhesion to Backsheet	ASTM D 903-2017	N/cm	≥100		
Thermal Shrinkage	ISO 11501-1995	%	MD <3, TD <1		
Optical Transmittance	IEC 62788-1-4	%		≥91	
UV Cut Off Wavelength	IEC 62788-1-4	nm	UV Transparent		
Refractive Index	ISO 489			1.48±0.05	
Dielectric Strength	ASTM D149	kV/mm		≥25	
Volume Resistivity	IEC 62788-1-2	Ohm.cm		≥1x10 <sup>15</sup>	
Gel Content	IEC 62788-1-6	%		≥75	
Lamination Parameters	Single Stage	Double Stage (Stage 1)		Double Stage (Stage 2)	
Evacuation Time (Minute)#	4 - 7	4 - 6			
Lamination Time (Minute)	7 - 10	2 - 4		6 - 9	
Temperature (°C )*	145 - 155	135 - 155			

<sup>•</sup> Temperature and #Vacuum to be uniformly maintained across the laminator chamber. #Periodic calibration of the machine input parameters to be done by Machine user.

<sup>•</sup> Lamination parameters change with increased width of Encapsulant/Module and/or increased thickness of Encapsulant and the same has to be re-tuned to arrive at acceptable results.

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# **CONSERV P - 14 FC**

#### **EVA Encapsulant**



PACKING: Unless specified, below is the standard packing of 'CONSERV'

- # Length/Roll: 240 or 300 linear metre & 10% LM variation
- # No. of Rolls/Pallet: 4 & 6, In vertical form.
- # Total Linear Metres/Pallet: 960 or 1800
- # Each roll is sealed in a protective bag and all rolls covered using corrugated sleeve / Outer Box
- # Boxes are strapped on suitable pallets

Note: The above technical information represents the typical range of properties and is believed to be correct as on date. However, this data should not be used to establish specification limits or used as basis for design. Lamination parameters and Quality of other components of the laminate during module manufacturing impact on the overall performance of the module, and hence we recommend the user to carry out intensive trials to test suitability of this product and module laminating conditions.

RenewSys gives no warranty and assumes no liability in connection with any use of this information and is subject to the RenewSys general terms and conditions.

