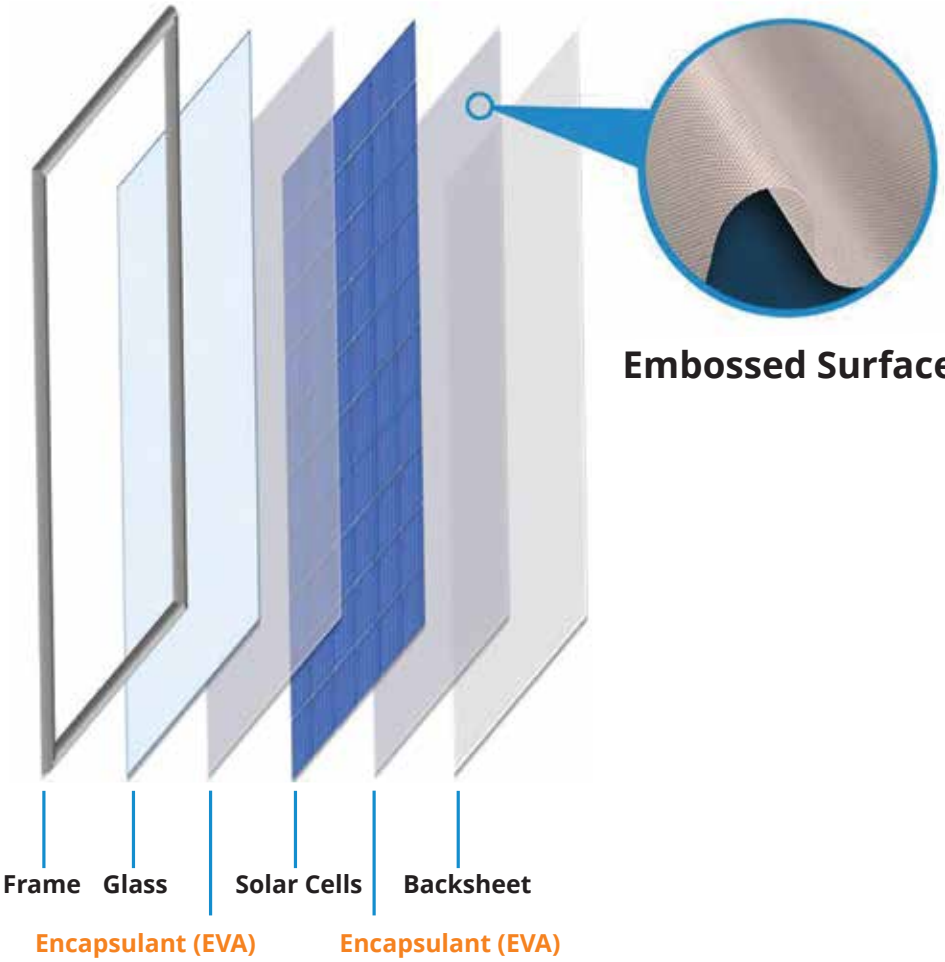
CONSERV U+

Encapsulant

RenewSys®
let there be light



'CONSERV 360 U+' is UV and weather stable Ethyl Vinyl Acetate (EVA) PV Encapsulant, specially designed in productivity perspective 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 UVT U+' is UV and weather stable, UV transparent Ethyl Vinyl Acetate (EVA) PV Encapsulant used as top layer towards the glass for all Crystalline PV Modules, and is specially designed in productivity perspective for single stage as well as short cycle multi stage lamination processes. It allows blue-light sensitive PV Cells of a given efficiency, to generate higher power.

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PROPERTIES - CONSERV 360 U+

Particulars	Test Method	Unit	Values
Thickness	ASTM D 6988 - 08	mm	0.45 - 0.65 ± 5%
Width	Scale	mm	Up to 1300
Melting Point	ISO 11357 - 3	^{0}C	70±2
Surface type	Visual	Unit	Inside: Matt; Outside: Embossed Supplied without Masking Paper
Tensile Strength	ASTM D 638	MPa	15 ± 3
Tensile Strain	ASTM D 638	%	≥ 500
Shore Hardness	ASTM D 2240	Shore - A	70±5
Water Absorption	ISO 62 - 200805	%	≤ 0.1
Adhesion to Glass	ASTM D 903	N/cm	≥ 100
Adhesion to Backsheet	ASTM D 903	N/cm	≥ 100
Thermal Shrinkage	160^{0}C, 5 min. on Glass Plate	%	≤ 2
Optical Transmittance	ASTM E 424	%	≥ 91
UV Cut Off Wavelength	ASTM E 424	nm	360
Refractive Index	ISO 489		1.48
Dielectric Strength	ASTM D149	kV/mm	≥ 25
Volume Resistivity	ASTM D 257	Ohm.cm	≥1x10^{16}
Gel Content	Soxhlet Method	%	≥ 80

Lamination Parameters	Single Stage	Double Stage (Stage 1)	Double Stage (Stage 2)
Evacuation Time (Minute)#	3 - 4	3 - 4	
Lamination Time (Minute)	4 - 6	1 - 2	3 - 5
Temperature (°C)*	150 - 168	150 - 168	

- *Temperature and #Vacuum to be uniformly maintained across the laminator. #Vacuum to be applied at -760 mm Hg, Periodic calibration of the machine input parameters to be done by Machine user.
- 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.
- With higher thickness of Encapsulant, there could be marginal loss in Transparency.

Storage Condition and Shelf Life: Store in undamaged original packaging, temperature between 20^{0}C and 30^0 C and humidity between 50-60% RH. Recommended use within 9 months from date of manufacture.

BENGALURU: +91-80-33671400 I MUMBAI: +91-22-68100500
www.renewsysworld.com I renewsys@renewsysindia.com

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

Length/Roll: 140 or 150 metre | # No. of Rolls/Pallet: 9 or 13

Total Linear Metres/Pallet: 1600 or 1620

Each roll is sealed in a protective bag in corrugated 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.

inter solar award 2018 Finalist

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E 360 - POE
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