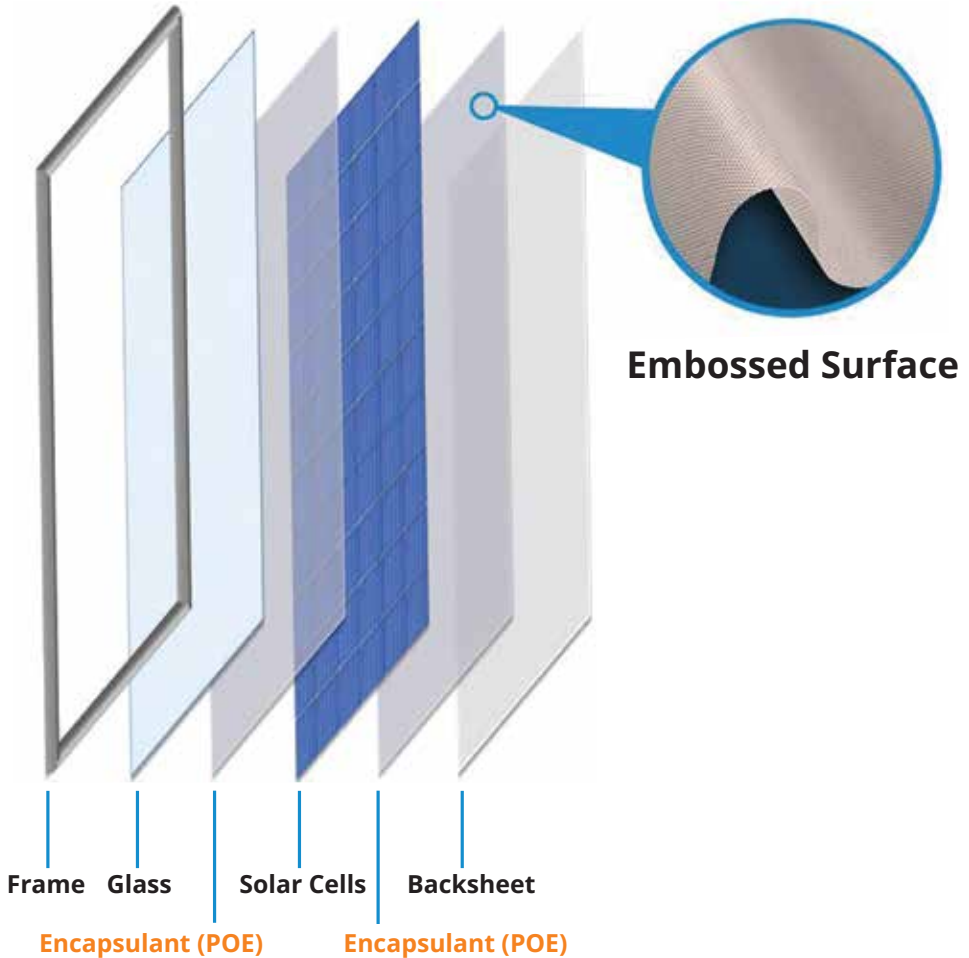


# CONSERV E-NT

## POE Encapsulant



**Embossed Surface**

CONSERVE-NT UVT<sup>1</sup> is a Polyolefin based Encapsulant, specifically designed for New Generation N-Type TOPCON cell based Solar PV modules. It has been formulated to sustain long lasting performance in diverse UV and weather conditions. The product can be used for Glass-to-Glass and Glass-to-Backsheet module constructions.

It allows PV Modules comprising blue-light sensitive cells of a given efficiency, to generate higher power.

### PROPERTIES - CONSERV E-NT UVT

Particulars	Test Method	Unit	Values
Thickness	ASTM D 6988 - 08	mm	0.45 - 0.75, $\pm$ 5%
Width	Scale	mm	Up to 1500
Melting Point	ISO 11357 - 3	$^{\circ}$ C	71 $\pm$ 5C
Surface type	Visual	Unit	Both Side embossed orange peel
Tensile Strength	ASTM D 638	MPa	12 $\pm$ 3
Tensile Strain	ASTM D 638	%	$\geq$ 500
Shore Hardness	ASTM D 2240	Shore - A	70 $\pm$ 5
Water Absorption	ISO 62 - 200805	%	$\leq$ 0.1
Adhesion to Glass	ASTM D 903	N/cm	$\geq$ 70
Adhesion to Backsheet	ASTM D 903	N/cm	$\geq$ 70
Thermal Shrinkage	16 $^{\circ}$ C, 5 min. on Glass Plate	%	$\leq$ 2
Thermal Creep	90 $^{\circ}$ C @ 250 hrs	mm	< 1
Optical Transmittance	ASTM E 424	%	$\geq$ 91
UV Cut Off Wavelength	ASTM E 424	nm	-
Volume Resistivity	ASTM D 257	Ohm.cm	$\geq$ 1x10 <sup>16</sup>
Gel Content	Soxhlet Method	%	50 - 80
<b>Lamination Parameters</b>	<b>Single Stage</b>	<b>Double Stage (Stage 1)</b>	<b>Double Stage (Stage 2)</b>
Evacuation Time (Minute) <sup>#</sup>	6 - 10	3 - 4	
Lamination Time (Minute)	12 - 16	2 - 4	7 - 9
Temperature ( $^{\circ}$ C) <sup>*</sup>	140 - 150	140 - 150	

<sup>\*</sup>Temperature and <sup>#</sup>Vacuum to be uniformly maintained across the laminator. <sup>#</sup>Vacuum to be applied at -760 mm Hg. Periodic calibration of the machine input parameters to be done by Machine user.

Storage Condition and Shelf Life: Store in undamaged original packaging, temperature:  $\leq$ 25 $^{\circ}$ C and humidity below 60% RH. Recommended to use within 6 months from the date of manufacture.

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

# Length/Roll: 100 Meter | # No. of Rolls/Pallet: 9 or 12 |

# Total Linear Metres/Pallet: 900 or 1200

# Each roll is sealed in a protective bag in a 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.