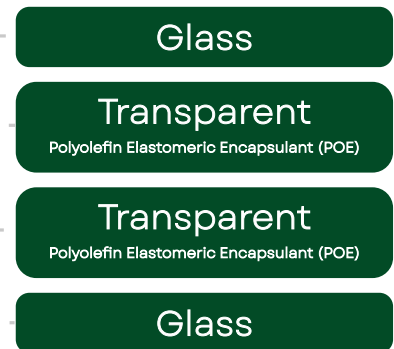
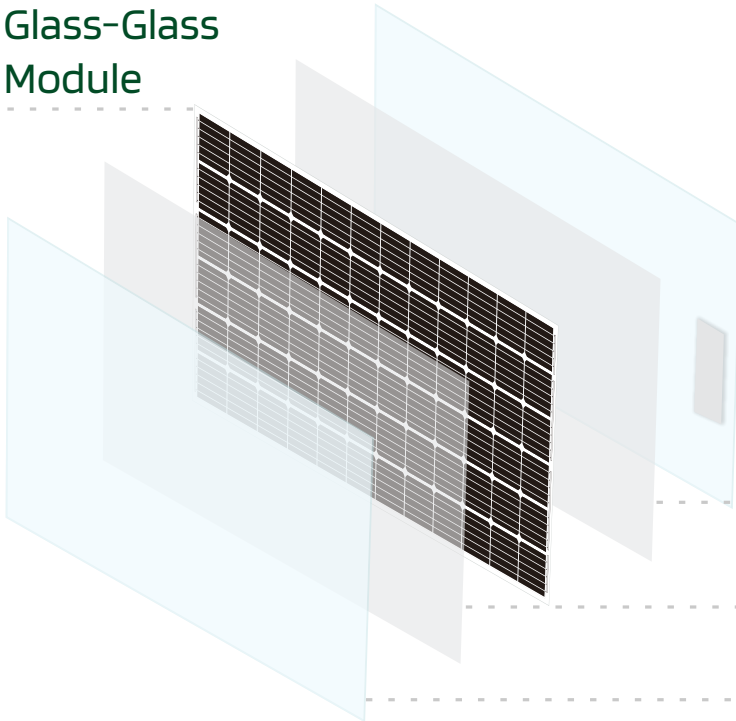


# PIX - Polyolefin Elastomeric Encapsulant (POE) - ET



## Glass-Glass Module



## ABOUT US

PIXON houses clean room and environment controlled facility up to 1 GW manufacturing line for Polyolefin Elastomeric Encapsulant (POE).

PIX Polyolefin Elastomeric Encapsulant (POE) - ET is a Polyolefin based Encapsulant, UV and weather stable, specially designed to suit Glass - to - Glass and Glass - to - Backsheet PV Modules with high efficiency PV Cells specially Heterojunction Solar PV Cell. On accounts of its innovative formulation, it combines and balances critical features of Polyolefin Elastomeric Encapsulant (POE) and TPO Encapsulants to cover wide range of PV Module designs uniquely.

The Polyolefin Elastomeric Encapsulant (POE) Encapsulant has been in the line of innovations and available in several versions. The advantages it offers include:

- Improve thermo-mechanical properties for durable performance in and out.
- UV cut-off, which means it protects the solar panels from getting damaged from UV Rays.
- Chemical inertness is another feature that prevents corrosion due to acid gas.
- Improved PID (voltage, heat, and humidity) resistance for superior performance.
- Higher volume resistivity to prevent the current leakage from the insulating material.

Well, the above features qualify the Polyolefin Elastomeric Encapsulant (POE) encapsulant as a top contender in the marketplace.

## CERTIFICATIONS



\*Due to continuous product updation, specifications may change without notice.

### PIXON GREEN ENERGY PRIVATE LIMITED

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## Solar is the new Green!

# TECHNICAL DATASHEET

## PIX Polyolefin Elastomeric Encapsulant (POE) - ET



### Technical Parameters For PIX Polyolefin Elastomeric Encapsulant (POE) - ET

	Particulars	Test Method	Unit	Values
Physical	Thickness	ASTM D 6988-08	mm	0.60 - 0.75 (+ 5% - 5%)
	Width	Scale	mm	Up to 1320
	Melting Point	ISO 11357-3	°C	72 ± 3
	Surface type	Visual	Unit	Both side embossed
Mechanical	Tensile Strength	ASTM D 638	Mpa	12 ± 4
	Tensile Strain	ASTM D 638	%	≥ 550
	Shore Hardness	ASTM D 2240	Shore - A	75 ± 5
Thermal	Water Absorption	ISO 62 - 200805	%	< 0.1
	Adhesion to Glass	ASTM D 903	N/cm	≥ 70
	Thermal Shrinkage	16 0°C, 5 min.on Glass Plate	%	< 2.5
	Thermal Creep	90°C @ 250 hrs	mm	≤ 1
Optical	Optical Transmittance	ASTM E 424	%	≥ 91
	UV Cut Off Wavelength	ASTM E 424	nm	UV Transparent
Electrical	Volume Resistivity	ASTM D 257	Ohm.cm	≥ 1x10 <sup>16</sup>
Chemical	Gel Content	ASTM D 2765 / Oven Method	%	55 - 85

Lamination Properties	Lamination Parameter	Single Stage	Double Stage (Stage 1)	Double Stage (Stage 2)
	Vacuum Time	6 - 10 min	3 - 4 min	-
	Lamination Time	12 - 16 min	2 - 4 min	7 - 9 min
	Temperature	150 - 160°C	150 - 160°C	-

\*Laminator recipe depends on type of laminator.

- 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°C and 30°C and humidity between 50-60% RH. Recommended use within 6 months from date of manufacture.

PACKAGING INFORMATION			
Unless specified, below is the standard packing data (for 500 micron thickness, 1123 mm width)			
Length/Roll	150 Meters	250 meters	300 meters
Nos of Rolls/Pallet	12	4	4
Total Linear Meters / Pallet	1800	1000	1200
Total SQM / Pallet	2021.4	1123	1347.6

Each Roll is sealed in a protective bag in corrugated box | Boxes are strapped on suitable pallets with Protection Angle Board.

\*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. **PIXON Green Energy Private Limited** gives no warranty and assumes no liability in connection with any use of this information and is **subject to the Pixon Green Energy terms and conditions.**