



SUSTAIN EPE



Low Shrinkage



Higher Volume Resistivity



Most consistent GSM



High peel strength



Dual-side embossing



PID-free and anti-snail trails

Sustain EPE products are a type of EVA and POE co-extrusion encapsulant film. EPE series provides a high cost-effective encapsulant solution for the PID-free requirement of P type and N type Bifacial PV modules. The 2 outermost EVA layers provide adhesion to cell and glass, while middle layer works as a better barrier to moisture ingress.

Outstanding light transmittance

28% VA Content

Excellent durability

Outstanding material compatibility

Easy to use

All Laminator friendly

SOLAR PANEL (EPE) ENCAPSULANT SHEET

SUSTAIN EPE HLT is high transmission, transparent & PID free, suitable to use as a front Encapsulant.

SUSTAIN EPE UVB is high UV resistant, transparent & PID free suitable to use as a Back Encapsulant.

PROPERTIES		UNIT	TEST METHOD	EPE HLT	EPE UVB
Thickness		µm	ASTM D6988-30	450 to 650 (±5%)	450 to 650 (±5%)
GSM		g/m ²	Internal Method	390 to 580 (±5%)	390 to 580 (±5%)
Width		mm	Internal (scale)	Customization (+7/0)	Customization (+7/0)
Gel content		%	ASTM D2765	≥ 75	≥ 75
Thermal Shrinkage	MD	%	5 Mins in oven at 150°C	≥ 3	≥ 3
	TD	%		≥ 2	≥ 2
UV cut of Wave length		nm	IEC 602788-1-4	- - -	340 - 360
Optical Transmittance		nm	IEC 602788-1-4	≥ 91	≥ 91
Dielectric Strength		kv/mm	ASTM D149	> 20	> 20
Adhesion strength	Glass	N/cm	ASTM D903	≥ 60	≥ 60
	Backsheet	N/cm	ASTM D903	≥ 40	≥ 40
Tensile Strength	MD	Mpa	ASTM D882	≥ 10 Mpa	≥ 10 Mpa
	TD	Mpa	ASTM D882	≥ 10 Mpa	≥ 10 Mpa
Elongation		%	ASTM D882	≥ 500	≥ 500
Volume Resistivity		Ω.cm	ASTM D 257	≥ 1×10 ¹⁵	≥ 1×10 ¹⁵
Comparative Tracking Index		V	IEC 60112:2003	600V	600V

Performance parameters Lamination Recommendations(Glass/Glass):

Sr. No	Laminator Configuration	Singlestage	Multistage	Multi Stack
1.	Evacuation time (min)	6-8	2-3	3-4
2.	Evacuation temp (°C)	145-150	145-150	145-150
3.	1 st -Press time (min)	- - -	1-3	- - -
4.	1 st -Press temp (°C)	- - -	145-150	145-150
5.	Curing time (min)	8-10	6-8	4-8
6.	Curing temp (°C)	145-150	145-155	150-165

Temperature & time are indicative to start with. Different make & model of laminator behaves differently.

❖Storage Conditions & Usage Period:

- ✓Store unopened original packaging at storage temperature of 25°C to 30°C and storage humidity < 60% RH. Recommended to use within 6 months from date of manufacturing.

❖Operational Benefits:

- ✓State of the art highly precise automation from raw material pick up to finish roll packing.
- ✓Raw material from highly reputed manufacturers
- ✓State of the art Laboratory having facility to check 100% raw material critical parameters.
- ✓Very clean manufacturing environment and premises

❖Product Technical Advantages:

- ✓Excellent Long-term Pid resistance.
- ✓High Damp heat resistance up 3000 hours
- ✓High adhesion to glass, metal, and polymer Back sheet
- ✓Maintaining long term adhesion.
- ✓High light transmission for max power yield