New'S™ by Sunbez™

SERIES : New'S EPE (TOP)

New'S EPE is a melt-processed, co-extruded film of EVA and POE, combining the strengths of both materials. It enhances solar module performance with anti-PID properties, excellent vapor and water resistance, and strong adhesion. This makes it highly suitable for glass-glass solar panels utilizing advanced technologies like PERC, TOPCon, or HJT cells, ensuring long-term durability and efficiency.

Description	Test Method/Standard	Value	Unit of Measure
Physical Property			
Film Grade	-	New'S EPE (TOP)	-
Thickness	ASTM D 6988-08	0.45-1.00 ± 5%	mm
Width	Scale	Up to 1500	mm
Melting Point	ISO 11357-3	60 - 70	°C
Tensile Strength	ASTM D 638	10 ± 3	MPa
Elongation	ASTM D 638	≥ 500	%
Hardness	ASTM D 2240	70-85	Shore-A
Adhesion with Glass	ASTM D 903	≥ 75	N/cm
Adhesion with Backsheet	ASTM D 903	≥ 70	N/cm
Gel content	ASTM D 2765	≥ 75	%
Water Absorption	ISO 62-200805	≤ 0.10	%
WVTR	ASTM F 1249	≤ 10	g/m^2-day
Thermal Property			
Thermal Shrinkage (TD)	160 °C for 5 Minutes On Glass Plate	≤ 1.50	%
Thermal Shrinkage (MD)		≤ 3.00	%
Thermal Conductivity	ISO 22007	0.031	w/m-K
Electrical Property			
Volume Resistivity	ASTM D 257	≥ 1.00 X 10^15	ohm.cm
Di-electric Strength	ASTM D 149	≥ 35	kV/mm
CTI (Comparative Tracking Index)	IEC 60112:2020	≥ 600	Volts
Optical Property			
Refractive Index	ASTM D 1218	1.50	-
Optical Transmittance	ASTM E 424	≥ 92	%
UV Cut-off		UV Transparent	nm
Yellow Index		≤ 1.00	ΔYI
Aging Property			
UV aging Peeling strength with glass	120 kwh/m^2	≥ 40	N/cm
UV aging Yellowness Index		ΔYI ≤ 5	ΔYI
DH Peeling Strength with glass	85°C 85%RH 1000H	≥ 40	N/cm
DH Yellowness Index		ΔYI ≤5	ΔYI

Storage Condition	Keep the product in its original packaging, at temperature < 30°C and 50-60% RH.
Shelf Life	It is recommended to use the product within 9 months from the date of manufacture.