

ALISHAN EPE-DC ENCAPSULANT

Alishan EPE-DC films are UV-downconversion films with benefits of low moisture ingress. These films are specifically designed for mitigating issues of UVID by converting UV portion of the solar spectrum into usable wavelength for power generation.

Product	Alishan EPE-DC			
Linear meter	Up to 300 meters			
Width	Up to 1350 mm			
Thickness	Up to 0.80 mm			
Properties	Description	Standard	UOM	Alishan EPE-DC
Physical properties	Tensile strength	ASTM D 638	MPa	12 ± 3
	Elongation		%	≥ 600
	Adhesion with Glass	ASTM D 903	N/cm	≥ 75
	Adhesion with Backsheet		N/cm	≥ 75
Thermal Property	Thermal Shrinkage	160 Deg C / 5 min	%	MD ≤ 3
				TD ≤ 1
Water Ingress	WVTR	ASTM F 1249	g/m ² .day	< 5
Electrical Property	Volume resistivity	ASTM D257-14	Ohm. cm	>1×10 ¹⁵
Gel content		ASTM D 2765	%	> 75
Optical Properties	Transmittance	ASTM E 424	%	≤ 25% (280 – 380 nm)
				≥ 91% (400 – 1,100 nm)
	Yellowness Index		-	< 2
	UV-cut off		nm	360
Lamination Parameters			UOM	Values
	Vacuum / Evacuation Time		Minutes	5 – 8
	Lamination / Pressing Time		Minutes	10 – 14
	Lamination Temperature		°C	120 – 150