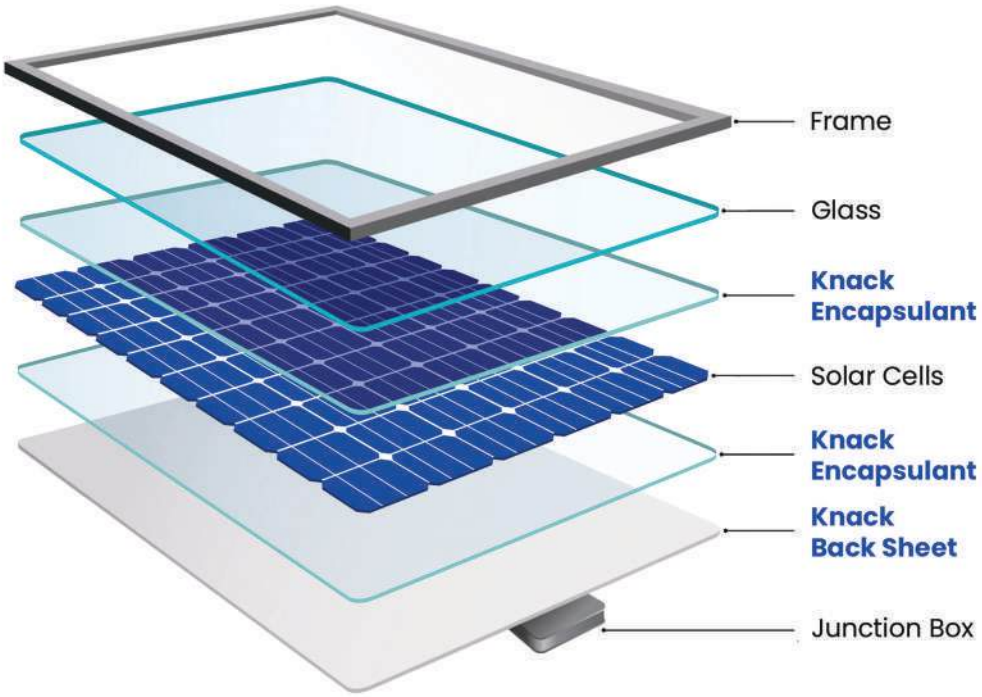
KNACK ENERGY PVT. LTD.

Empowering the future...

One of the leading manufacturers
and exporters of Solar PV

ENCAPSULANTS AND BACKSHEETS



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EVA

EVA range provides excellent bond with glass & Backsheet, high transparency gives less CTM loss and high power generation. It is PID and snail trails resistance, UV and weather stable solar PV Encapsulant. It has wide process window, proven for single stage as well as short cycle multi stage lamination processes.

KNACK UVT PFC

- Fast Cure, Cycle time 13-15 minutes
- PID and Snail trail resistance
- UV Transparent, allows more rays to reach solar cell and gives more power
- Weather and UV stable, proven for 25 years of module life
- Suitable for all types of PV modules

KNACK 360 PFC

- Fast Cure, Cycle time 13-15 minutes
- PID and Snail trail resistance
- UV cut-off 360nm
- Weather and UV stable, proven for 25 years of module life
- Suitable for all types of PV modules

KNACK UVT PUC

- Ultra Fast Cure, Cycle time 09-12 minutes
- PID and Snail trail resistance
- UV Transparent, allows more rays to reach solar cell and gives more power
- Weather and UV stable, proven for 25 years of module life
- Suitable for all types of PV modules

KNACK 360 PUC

- Ultra Fast Cure, Cycle time 09-12 minutes
- PID and Snail trail resistance
- UV cut-off 360nm
- Weather and UV stable, proven for 25 years of module life
- Suitable for all types of PV modules

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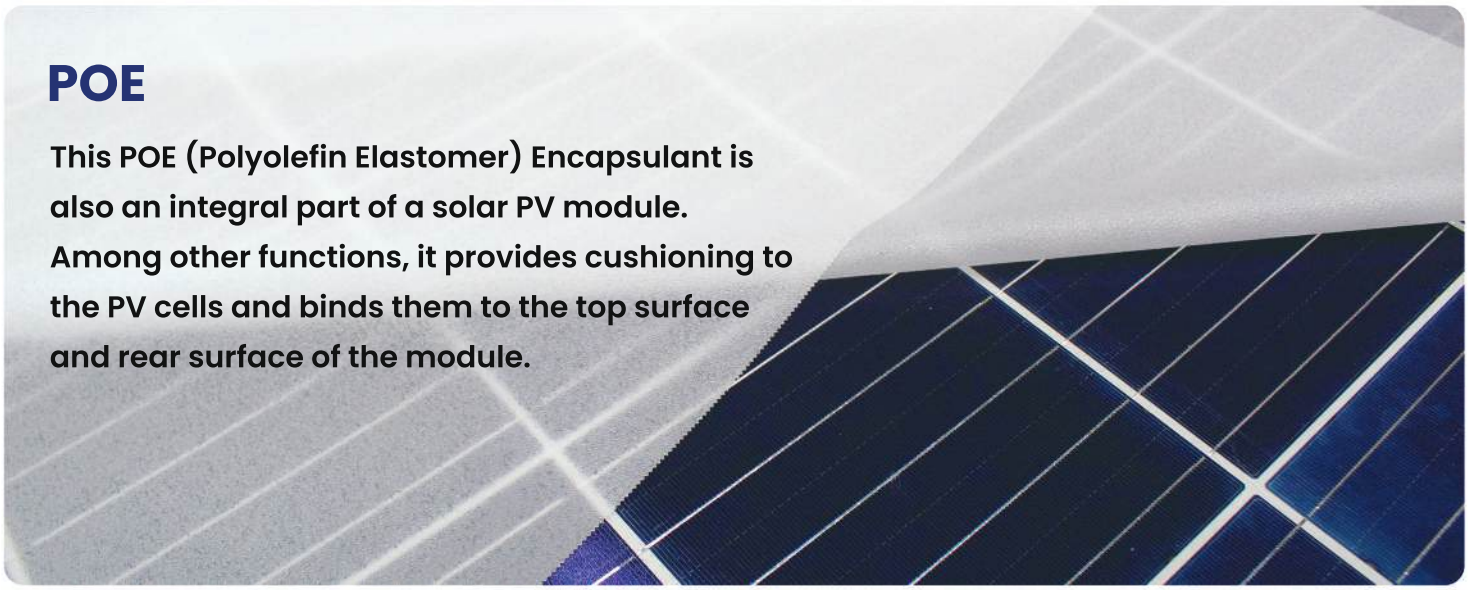
POE



This POE (Polyolefin Elastomer) Encapsulant is also an integral part of a solar PV module. Among other functions, it provides cushioning to the PV cells and binds them to the top surface and rear surface of the module.

POE is known for its flexibility and elasticity, allowing it to conform well to the surfaces of solar cells and other module components. This property enhances adhesion and helps accommodate mechanical stresses during the manufacturing process and throughout

KNACK POE

- POE offers excellent PID and improved moisture resistance compared to EVA due to its molecular structure.
- It prevents corrosion due to chemical inertness.
- POE exhibits better thermal stability, making it more resistant to heat and temperature fluctuations
- UV transparent, allows more rays to reach solar cells and gives more power.
- Best suitable for Glass to Glass module.

KNACK 360 POE

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- It prevents corrosion due to chemical inertness.
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- UV cut-off 360 nm.
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EPE

EPE Encapsulant is a multilayer film consisting of a thin layer of POE sandwiched between two layers of EVA, produced through the co-extrusion process. This innovative construction aims to harness the best attributes of both EVA and POE Encapsulant.

The central POE layer acts as a superior water vapor barrier and also enhances the anti-PID performance, while the outer EVA layers provide improved adhesion to glass and PV cells. As the solar industry continues to evolve, EPE demonstrates its potential to play a pivotal role in enhancing the performance and durability of solar PV modules.

KNACK EPE

- EPE offers good PID resistance due to its core POE layer.
- EPE provides excellent adhesion with glass, Backsheet and cells compared to POE and is similar to EVA.
- UV transparent, allows more rays to reach solar cells and gives more power.
- Lamination time for EPE is approximately shorter than POE and equal to EVA.
- Best suitable for Glass to Glass module.

KNACK 360 EPE

- EPE offers good PID resistance due to its core POE layer.
- EPE provides excellent adhesion with glass, Backsheet and cells compared to POE and is similar to EVA.
- UV cut-off 360 nm.
- Lamination time for EPE is approximately shorter than POE and equal to EVA.
- Best suitable for Glass to Backsheet module.

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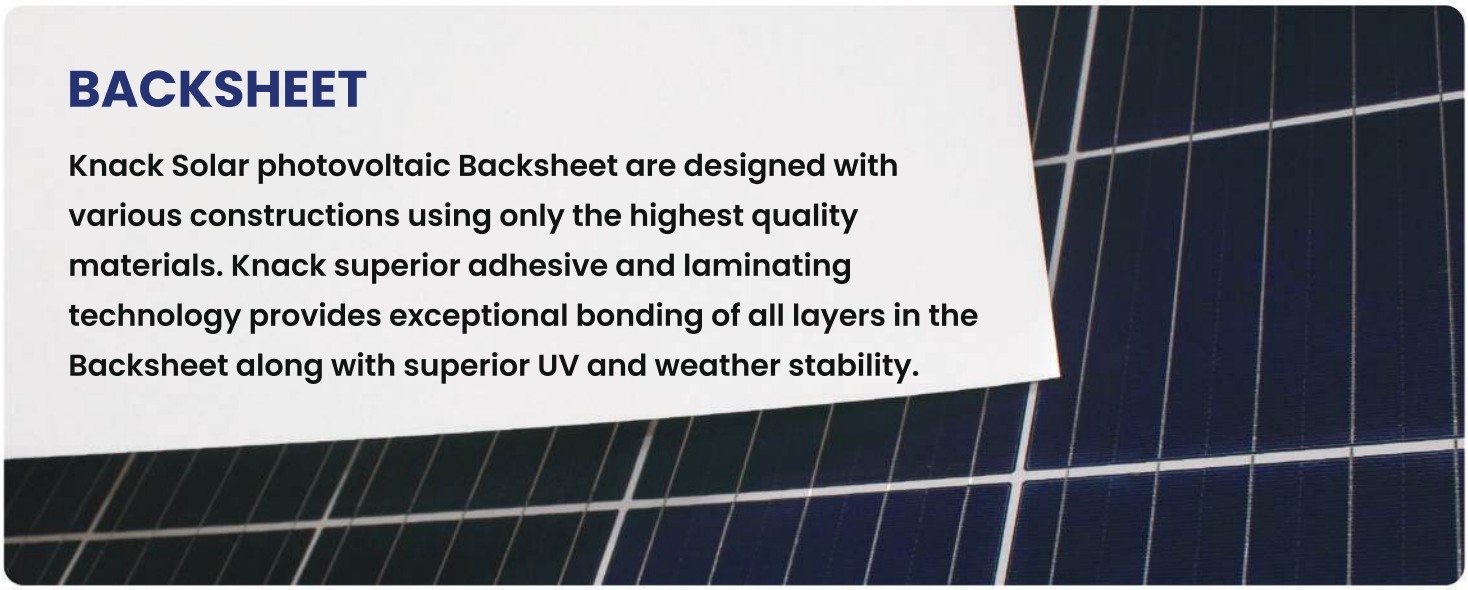
BACKSHEET

Knack Solar photovoltaic Backsheet are designed with various constructions using only the highest quality materials. Knack superior adhesive and laminating technology provides exceptional bonding of all layers in the Backsheet along with superior UV and weather stability.



KNACK PET BACKSHEET

Knack PET Backsheet has excellent weathering and hydrolysis resistance and provide an economical option for Solar Module makers to choose a quality product. Knack PET Backsheet is designed uniquely with inseparable layers of PET along with a high bonding Knack specialized primer layer.

- **KNACK BS PET W10**
- **KNACK BS PET W15**
- **KNACK BS PET T15**

KNACK PVDF BACKSHEET

PVDF is highly weather stable material. It gives excellent moisture, chemical, abrasion and UV resistance. Knack PVDF Backsheet is made with three-layer. It has air side PVDF, center layer PET and cell side Knack specialized primer layer.

- **KNACK BS PVDF W15**
- **KNACK BS PVDF T15**
- **KNACK BS PVDF B15**

KNACK FLUORO COATED BACKSHEET

It is highly weather stable. It gives excellent moisture, chemical, abrasion and UV resistance. Knack fluoro coated Backsheet is designed uniquely with air side fluorine coating, center layer PET and Cell side knack specialized primer layer.

- **KNACK BS FC W15**
- **KNACK BS FC T15**
- **KNACK BS FC B15**

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