India's first & leading manufacturer of Solar EVA Encapsulants

Compatibility with wide range of cells & backsheets and fluxes 50,000* hours of real environmental testing
Preferred by over 50 module Manufacturers, across 10* states
Enhanced Transparency & PID Resistance 200MW* of module laminations
Excellent peeling strength & crosslinking ratio
Backed by over 30 years of EVA processing experience
With over 50,000+ hours of real environmental testing and over 200 MW of module laminations, 'Brij Advantage' series of module encapsulation solutions have been serving the industry since 2011. Optimised for hot and humid conditions at its ultra modern & fully automated production facility, 'Brij Encapsulants' offer lower failure rates, better performance and slower degradation during module lifetime, providing better overall return on investments. With separate quality assurance team performing regular in-line quality checks, Brij assures that your modules will last not for 25 years but for a lifetime.

Minimise your risks, save on costs and stay protected.
Stay 'Brij Protected'.
Solar EVA Encapsulants

A solar module though looks simple, is a combination of highly engineered materials working in tandem to harness energy. One such component is the Ethylene Vinyl Acetate (EVA) encapsulant. This transparent layer of plastomer forms a protective layer over and under the solar cells preventing water, dirt and other external impurities from contaminating the cells and at the same time ensures optical transmissivity and electrical isolation. These encapsulants ensure that the module can be used outdoors for over 25 years without significant degradation.

Product Characteristics & Specifications

- Thickness upto 0.50 mm ± 0.02 mm
- Width upto 1300 mm ±10mm
- Length 100m ±1.5m

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Brij Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melt Index</td>
<td>g/10 mins</td>
<td>30</td>
</tr>
<tr>
<td>Softening Point</td>
<td>°C</td>
<td>58</td>
</tr>
<tr>
<td>Density</td>
<td>g/cm³</td>
<td>0.96</td>
</tr>
<tr>
<td>Appearance</td>
<td>-</td>
<td>Smooth surface with special knurling for better air exhaustion. Uniform thickness, no discoloration and non-stick at room temperature</td>
</tr>
<tr>
<td>Transparence (after curing)</td>
<td>%</td>
<td>≥ 92</td>
</tr>
<tr>
<td>UV - Cutoff Wave length</td>
<td>Nm</td>
<td>360</td>
</tr>
<tr>
<td>Crosslinking ratio</td>
<td>%</td>
<td>≥ 80</td>
</tr>
<tr>
<td>Peeling Strength</td>
<td>N/cm from glass</td>
<td>≥ 75</td>
</tr>
<tr>
<td>Shrinkage Rate</td>
<td>%</td>
<td>≤ 2</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>MPa</td>
<td>≥ 21.5</td>
</tr>
<tr>
<td>Elongation at Break</td>
<td>%</td>
<td>≥ 518</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>%</td>
<td>≤ 0.04</td>
</tr>
<tr>
<td>Dielectric strength</td>
<td>KV/mm</td>
<td>25</td>
</tr>
<tr>
<td>Resistance to temperature, moisture and cold</td>
<td>-</td>
<td>No bubble, no cracking, peeling or discoloration. No expansion with heat or contraction with cold. Power loss&lt;5%, and sheet ΔY1&lt;2</td>
</tr>
</tbody>
</table>

*Refer to our product data sheet for details

Research, Development & Quality Assurance

Since its inception in 2011, Brij has been a leading manufacturer of solar EVA encapsulants in India. Brij invests in R&D to ensure continual improvement of its products through better formulations and to ensure price competitiveness through manufacturing process optimisations.

- Crosslinking ratio
- Thermal shrinkage
- Peeling strength
- Water absorption
- Lamination (T-P-t)
- Water content
- Tensile strength
- Young's modulus
- Damp heat
- Elongation at break

The quality assurance division at Brij certifies each batch for conformity to required ISO, ASTM and IEC standards through rigorous testing at Brij's internal test laboratory.

The Brij Advantage

- Brij Experience
  - Backed by more than 30 years of EVA processing experience

- Technology Advantage
  - Low shrinkage, better PID resistance, faster lamination cycle, increased transparency and stronger adhesion

- Cost Advantage
  - Lower inventory and storage costs with reduced import burdens and currency fluctuations

- Logistics Advantage
  - Easy stock management and reduced hassles due to weekly, fortnightly or monthly delivery cycles

- Industry Advantage
  - More than 5 years of operation, 50,000+ hours of real environmental testing and 200MW+ module laminations

Switch today & experience the ‘Brij Advantage’
Lamination is the most important process in making of solar modules. A good laminate ensures long life and enhances the durability of PV modules whereas an improper one can lead to early or premature module failures. Understanding the complete process not only helps in producing a better product but also reduces losses like cell breakage, air ingress, optically couple superstrate materials (e.g., glass) to PV cells, protect components from mechanical stress and damage, and protect materials from corrosion.

Encapsulants serve multiple other purposes also. They physically hold module components in place, provide electrical insulation, reduce moisture permeability, provide support & fixation of solar cells and allied components, to help provide better electrical isolation, to ensure better absorbance of incident solar radiation, to provide resistance to leakage currents, and protect components from corrosion.

To provide resistance to leakage currents, to ensure better absorbance of incident solar radiation, to provide resistance to leakage currents, and protect components from corrosion.

Since decades, photovoltaic modules have been encapsulated with crosslinked Ethylene Vinyl Acetate (EVA) in one key factor in reducing the costs of photovoltaic systems is to increase the reliability and the service lifetime of the PV modules. Solar modules undergo harsh environmental stresses under constant variations of temperature and humidity. In addition, the modules also have to withstand the complete process not only helps in producing a better product but also reduces losses like cell breakage, air ingress, optically couple superstrate materials (e.g., glass) to PV cells, protect components from mechanical stress and damage, and protect materials from corrosion.

Crosslinked EVA Sheets

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Sales Partner

*Sales Partner enquiry solicited