

Encapsulant Technologies

POE Products



MANUFACTURED OUTSIDE CLEVELAND, OH

Polyolefin Elastomer (POE) materials have emerged to meet the challenges of new module designs that are sensitive to moisture. Thin film devices, heterojunction cells, and glass/glass modules all benefit from superior moisture resistance while large panels and high-power outputs gain from improved volume resistivity. These qualities are offered in a good POE material such as those in the H.B. Fuller PHOTOCAP POE product line.



PHOTOCAP® 6048

PHOTOCAP 6048 encapsulant is a thermoplastic POE, non-EVA based encapsulating film best suited for thin film modules.

Used for all photovoltaic devices, ideal for thin film modules.

Technology: Polyolefin Elastomer (POE); Thermoplastic

Features and Benefits:

- Lower MVTR than EVA based encapsulants
- High VR $\geq 10^{16}$ Ω -cm
- Shortest lamination cycle ≤ 10 minutes
- Excellent light transmission for a thermoplastic



PHOTOCAP® 3650

PHOTOCAP 3650 encapsulant is an ultra-fast cure and Potential Induced Degradation (PID) resistant thermoset polyolefin encapsulant with a higher UV cutoff.

Used for photovoltaic devices that require enhanced UV protection.

Technology: Polyolefin Elastomer (POE); Thermoset polyolefin, UV blocking

Features and Benefits:

- Lower MVTR than EVA based encapsulants
- High VR $\geq 10^{16}$ Ω -cm
- Short lamination cycle
- UV blocking, robust UV cutoff approx. 360 nm
- Designed for a dual encapsulating system with PHOTOCAP 3610 HLT encapsulant



PHOTOCAP® 3610 HLT™

PHOTOCAP 3610 HLT encapsulant is an ultra-fast cure and Potential Induced Degradation (PID) resistant thermoset polyolefin encapsulant with HLT higher light transmission in the UV wavelength region to allow greater power generation with blue light sensitive photovoltaic devices.

Used for front side encapsulation of all photovoltaic devices.

Technology: Polyolefin Elastomer (POE), HLT Thermoset polyolefin

Features and Benefits:

- Lower MVTR than EVA based encapsulants
- High VR $\geq 10^{16}$ Ω -cm
- Short lamination cycle
- Best in class light transmission: UV transparent with increased power output (approx. 1%)
- Designed for a dual encapsulating system with PHOTOCAP 3650 encapsulant

Encapsulant Technologies

EVA Products



MANUFACTURED OUTSIDE CLEVELAND, OH

Ethylene Vinyl Acetate Copolymer (EVA) has been the go-to material used in solar encapsulants since Specialized Technology Resources, Inc. launched the first one over four decades ago. PHOTOCAP EVA is the only encapsulant technology with a proven track record of maintaining durability, adhesion, stability and transparency after more than 25 years of field exposure.



PHOTOCAP® 15580P

PHOTOCAP 15580P encapsulant is an ultra-fast cure and Potential Induced Degradation (PID) resistant Ethylene Vinyl Acetate Copolymer (EVA) photovoltaic encapsulating film designed for use in all photovoltaic devices.

Used for photovoltaic devices that require enhanced UV protection.

Technology: Ethylene Vinyl Acetate Copolymer (EVA)

Features and Benefits:

- Ultra-low shrinkage
- Short lamination cycle
- UV blocking, robust UV cutoff approx. 360 nm
- Designed for a dual encapsulating system with PHOTOCAP 15585P HLT encapsulant



PHOTOCAP® 15585P HLT™

PHOTOCAP 15585P HLT encapsulant is an ultra fast cure and Potential Induced Degradation (PID) resistant Ethylene Vinyl Acetate Copolymer (EVA) photovoltaic encapsulating film with HLT higher light transmission in the UV wavelength region to allow greater power generation with blue light sensitive photovoltaic devices.

Used for front side encapsulation of all photovoltaic devices.

Technology: Ethylene Vinyl Acetate Copolymer (EVA); HLT higher light transmission

Features and Benefits:

- Ultra-low shrinkage
- Short lamination cycle
- Best in class light transmission: UV transparent with increased power output (approx. 1%)
- Designed for a dual encapsulating system with PHOTOCAP 15580P encapsulant

For more information on what we offer in solar, visit us at www.hbfuller.com/solar

IMPORTANT: It is the user's responsibility to test and determine the suitability of a product for the user's intended use. Any product samples provided for testing are provided in accordance with standard limited warranties as stated on our technical data sheets, and the H.B. Fuller General Terms and Conditions of Sale apply. All other terms are rejected.

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