



3M™ Encapsulant Film PO8510W

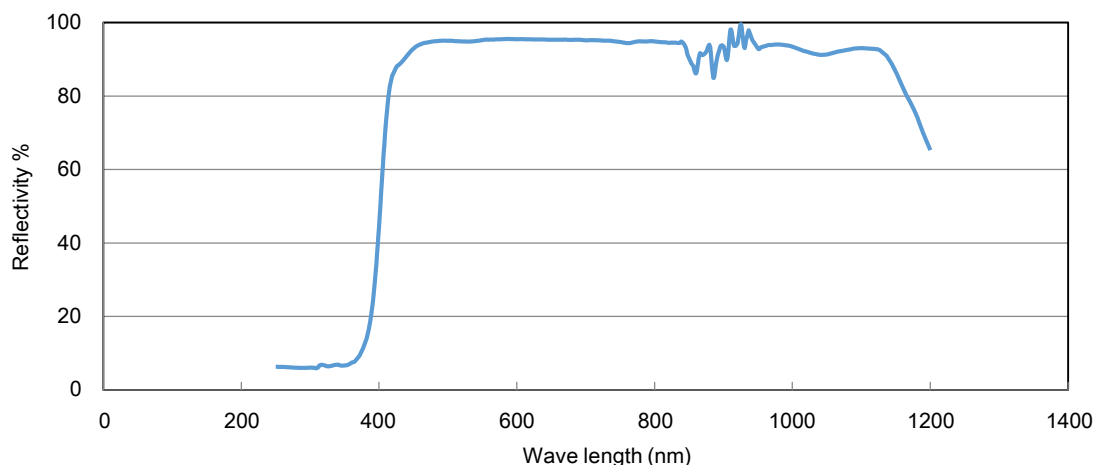
Polyolefin Encapsulant for Photovoltaic Modules

Product Introduction

3M™ Encapsulant Film PO8510W offers protection against UV aging and weathering – while enabling maximum light reflectivity to increase power efficiency of PV module. Suitable for both Glass/Backsheet and Glass/Glass modules.

Features

- Conformable and flexible for easy lamination
- Durable bonding strength with both glass and backsheet
- Excellent UV and damp-heat stability
- Low shrinkage rate
- High light reflection
- No acetic acid/No corrosion
- 1/10th MVTR vs. EVA
- Good compatibility with CIGS Modules
- >130°C Creep



Typical Physical Properties (data not for specification purposes)

Items		Units	Typical Value	Test Method
Unit Weight		g/m ²	360-460	
Tensile (Cured)	MD	MPa	6.5	ASTM D882
	TD	MPa	5.0	
Elongation (Cured)	MD	%	50	ASTM D882
	TD	%	55	
Adhesion to Glass		N/cm	70	ASTM D903
Volume Resistivity (Cured)		Ω·cm	2.0×10 ¹⁴	ASTM D257
Reflectivity		%	90	ASTM 97
Dimensional Stability (Uncured, 120 °C 3min)	MD	%	-2.2	ASTM 1204
	TD	%	0.8	
UV Resistance(32kWh/m ²)	Δb*	-	1.0	ASTM G154

Data not for specification purpose

Suggested Lamination Conditions

Condition	Suggested Value
Lamination Temperature	148-160°C
Evacuation Time	5-12 min
Press Time	15-18 min

Storage

Shelf life is 6 months under proper storage conditions. The product shall be stored indoor with the temperature controlled between 0°C-30°C and relative humidity below 60%, avoiding direct sunlight. The product shall not be placed near any heating equipment or exposed in a dusty place. Check the package box of stored product before unfolding. The product shall be used up as soon as possible after the package is unfolded. The unused should be properly sealed with original package or similar package.

[For more information on our solar manufacturing product line, contact 3M Renewable Energy at 800-755-2654 or visit us at \[www.3M.com/solar\]\(http://www.3M.com/solar\).](#)

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