

# SiITRUST™ E110 ENCAPSULANT

### **Description**

SilTRUST E110 encapsulant for photovoltaic cells has optical properties favorable for a higher light-to-electricity conversion yield and excellent mechanical properties that have been shown to withstand extreme exposure conditions during the photovoltaic panel life cycle.

#### **Key Features and Benefits**

- significant increase in the efficiency and durability of photovoltaic modules compared to traditional modules
- potentially longer life span of PV projects may offer longer-term return on investment
- extended durability in terms of reduced cell breakage, corrosion protection, damp heat resistance, mitigation of potential induced degradation and thermal cycling robustness

### **Typical Physical Properties**

<b>Uncured Properties</b>			
		Siltrust E110 A	SiITRUST E110 B
Appearance		Translucent	Translucent
Density	g/cm <sup>3</sup>	1.01	1.01
Viscosity <sup>(1)</sup>	Pa•s	34	28
Mix Ratio by Weight		1:1	

Viscosity after Mixing <sup>(1)</sup>	Pa•s	32	
Pot Life	hr	>12	
<b>Cured Properties</b>			
Mechanical			
		SilTRUST E110	
Cured Properties after 10 min at 80°C.		Mix ratio A:B = 1:1 by weight	
Appearance		Translucent rubber	
Density	g/cm <sup>3</sup>	1.036	
Hardness	Shore A	20	
Tensile Strength	N/mm <sup>2</sup>	2.0	
Elongation	%	400	
Optical Transmission <sup>(2)</sup>	%	98.8	
Refractive Index <sup>(2)</sup>		1.446	
Electrical			
Volume Resistivity	Ω•m	3.6 • 10 <sup>12</sup>	
Dielectric Strength <sup>(3)</sup>	kV/mm	37	

- (1) Shear rate 10/s
- (2) AM 1.5 G, obtained on 0.5 mm sheet
- (3) Obtained on 0.4 mm sheet Cured Properties

Typical product data values should not be used as specifications.

### **Potential Applications**

Encapsulation of crystalline silicon photovoltaic cells in solar modules.

#### **Patent Status**

Standard copy to come

## **Product Safety, Handling and Storage**

Standard copy to come

#### Limitations

Standard copy to come

#### **Contact Information**

For product prices, availability, or order placement, contact our customer service at Momentive.com/CustomerService/

For literature and technical assistance, visit our website at: www.momentive.com

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