

## SiTRUST™ E110

### Description

SiTRUST\* 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

Uncured Properties			
		SiTRUST E110 A	SiTRUST 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>		
<b>Mechanical</b>		
<b>SiITRUST E110</b>		
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
<b>Electrical</b>		
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

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