

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 ³	1.01	1.01
Viscosity ⁽¹⁾	Pa•s	34	28
Mix Ratio by Weight		1:1	

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

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

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