

Hybrid Series

NovoVellum® HFC01

A high quality and strong POE-based formulation offering security and long lasting protection to your modules. NovoVellum® HFC01 is a black colored encapsulant designed for durable BIPV projects. Its opaqueness is the perfect solution to create uniform aesthetic-looking module designs while protecting the solar cells with its high-barrier functionality.

Property features	Test method	Unit	
Thickness sheet		µm	200 – 1100
Width sheet		mm	Up to 1450
Core inside diameter		mm	76 or 152
Surface finish			Matt, rough or polished
Packaging			Aluminium bag
Interleaving foil			20µm LDPE, optional
Uncured properties	Test method	Unit (caliper 460 µm)	
OPTICAL PROPERTIES			
Integrated transmission 400 – 800 nm	In house method	%	0
Maximum transmission	In house method	%	N.A.
MECHANICAL PROPERTIES			
Modulus	ISO 527-3	MPa	50
Nominal strain at break	ISO 527-3	%	> 350
Tensile stress at break	ISO 527-3	MPa	5
Hardness Shore A	DIN 53 505	-	65
Shrinkage	On glass		
130°C		%	0.5
140°C		%	1.5
150°C		%	2.5
OTHER PROPERTIES			
Normalized water vapor transmission rate	ASTM F1249	g.mm/(m²day)	< 1.5
Density		g/cm³	0.95
Cured properties	Test method	Unit	
ELECTRICAL PROPERTIES			
Dielectric strength	ASTM D149-09 meth A		
Dielectric strength		MV/m	> 35
Breakdown voltage		kV	> 15
DC resistance of insulating materials	ASTM 257-07		
Volume resistance		Ω	> 4 x 10 ¹²
Volume resistivity		Ω cm	> 1 x 10 ¹⁵
OTHER PROPERTIES			
Adhesion to glass		N/cm	> 40 *

* Value function of cure conditions.



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