



# SHELL-Shield®PV

ACTIVE SELF-CLEANING NANOTECHNOLOGY FOR THE PROTECTION OF PHOTOVOLTAIC PANEL SURFACES

**Product Description** SHELL-Shield PV is a nanotechnology water-based suspension especially designed for the PV's surfaces modifying them in super-hydrophilic, self-cleaning and anti-fogging.

#### Benefits:

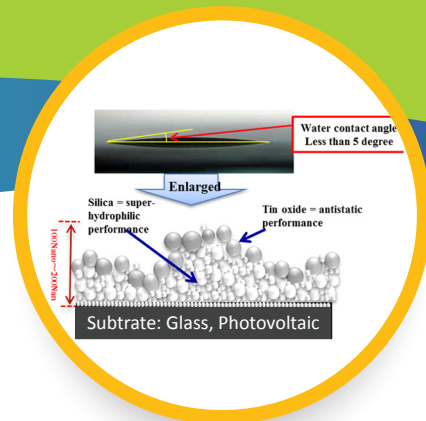
- ✓ Easy to apply - Cures at room temperature
- ✓ Self-cleaning; push away water & dirt
- ✓ Ready-to-use
- ✓ Protection from fungi development
- ✓ Hydrophilic; self-cleaning effect
- ✓ 2-4 % diffraction of light. Allows more light and energy into the panel



**Untreated  
PV Panel**



**SHELL-SHIELD PV  
Super Hydrophilic PV Panel**



## Composition:

Water-based formulation that consists of inorganic binder and innovative nano-titanium dioxide.

<b>Contact angle:</b>	<4° (super-hydrophilic)
<b>Antibacterial test:</b>	88.6% bacteria colonies reduction within 4 hours
<b>Antifungal test:</b>	81.3% fungi colonies reduction within 4 hours

## Technical Characteristic

Appearance/Color	Milky white liquid
pH	8.5 - 9.5
Density	0.985 g/ml
Solubility in water	Completely miscible
Viscosity	12mPa.s at 25°C

## Application Note

Shake or stir the container before use. Prior to application clean the surface with water or a solvent using a microfiber cloth. The application surface should be dry and clean. Apply **SHELL-Shield PV** by HVLP sprayer. Two or three applications of a very thin layer are required. Between each application let the material dry (up to 10 minutes strongly dependent on the ambient temperature). Do not apply excess of the material on the glass surface. Total consumption rate of 30-38 m<sup>2</sup>/L is recommended. After the application let the material to cure on the surface without wiping or touching it. Only water is necessary for the cleaning of the coated surface.

<b>Packaging</b>	5 LITRES - 25 LITRES
<b>Cleaning of Tools</b>	Use tap water
<b>Storage Stability</b>	<b>SHELL-Shield®PV</b> is stable for 24 months when kept unopened in its original container, protected from frost and direct sunlight.

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