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in high performance coatings**

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Solar PV

nanoShell Performance Coatings

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nanoShell Solar PV

nanoShell Solar PV is a unique high quality self-clean, hydrophobic nano coating that can be applied pre and post installation. It will create a high performance long lasting, easy to clean protective coating on all forms of solar PV panels that will also improve the energy production of each panel by around 10% (based on UK testing).

Product Description

- Clear, colourless liquid
- Fully Hydrophobic
- Reduced stick for easy clean
- Contains alcohol for long term protection
- Frost resistant
- Can be applied from -25 °C to +80 °C

Features

- Provides a hydrophobic coating to push water away from the lens surface to increase efficiency and energy production.
- Provides a reduced stick easy to clean surface - less dirt and dust adheres and is far easier to clean
- Only fresh water is now required to clean the panels saving eliminating the use of detergents and cleaning chemicals
- Coating will last up to 5 years before reapplication is necessary
- Generates an invisible surface protection
- Protects from bird fouling and other heavy soiling sticking to the panels glass surface
- Can be applied in direct sunlight and high heat up to 80°C
- Treated surfaces require far less cleaning and maintenance and only water to clean, reducing the costs and time for cleaning and care
- Is supplied ready to use and easy to apply

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Intended Use

- Can be applied pre or post installation onto all forms of solar glass panels.

Application

For the application you will require:

- nanoShell Solar PV
- Cleaning agent such as Isopropyl alcohol
- Disposable/protective gloves
- Eye protection
- Clean lint free cloths
- Bucket of fresh water or hose pipe supply

Before application it is important to make sure the surface is clean and free from oil and grease. For best results use Isopropyl Alcohol to clean over the surface of each panel using a small circular motion. The Isopropyl alcohol has a very good cleaning effect and does not leave any residues on the glass surface.

All cleaning detergents should be thoroughly rinsed away and the surface manually or naturally left to dry.

Application

1. Clean the panel glass thoroughly with the isopropyl alcohol.
2. Rub the panel glass dry with a clean dry cloth.
3. Apply nanoShell Solar PV over the whole panel glass area using small circular motions. Approximately 15-20ml/m² should be applied.
4. After 5 minutes wash away the excess material (fog) with clear cold water and a sponge.
5. Remove the rest of the water with a squeegee/puller.

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Product Safety and Handling

Before considering the use of any chemical read its Material Safety Data Sheet thoroughly for safety and toxicological data as well as for information on proper transportation, storage and use. The Material Safety Data Sheet is available upon request from your **nanoShell** representative or by going online at www.nanoshell.co.uk

Packaging and Storage

nanoShell Solar PV is supplied in 250 ml, 1l, 5l, 10l and 20l bottles/container.

nanoShell Solar PV should not come into contact with moisture and should therefore be kept in its airtight container prior to use. Do not store in direct sunlight or expose to additional heat sources.

Material should be stored at temperatures between -10 °C and +40 °C.

nanoShell Solar PV has a shelf life of over 100 years when stored in sealed containers.

Maintenance of Coatings

The maintenance intervals will vary depending on the degree of exposure, design of the component, local pollution factors and the original application.

Cleaning of the coating surface should be carried out using only water. Use of strong detergents and abrasive cleaning processes will break down the surface protection and greatly reduce the performance of the coating.

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