

MAGIC SOLAR COAT ^{SiO₂}

Hydrophobic Self-cleaning PV Solar Panel Coating



SELF-CLEANING NANO COATING FOR SOLAR COLLECTORS

Magic Solar Coat ^{SiO₂} Self-cleaning Coating

A nano coating with hydrophobic and self-cleaning properties for photovoltaic (PV) and solar thermal panels. The coating's self-cleaning glass effect stops dust and bird faeces from sticking to PV panels, keeping them clean; maintaining their efficiency, ensuring the maximum amount of electricity is produced. The hydrophobic properties repel water more quickly than uncoated "self-cleaning glass" as found on typical PV panels. This makes cells treated with the Solar Panel Coating more efficient during inclement weather.

Coating Description

- A nano coating for Photovoltaic and Solar Thermal panels with self-cleaning glass and hydrophobic properties
- An invisible coating which prevents dirt, algae and bird fouling from adhering to glass
- Anti-wetting and self-cleaning glass properties improve PV efficiency in inclement weather
- Drastically reduced cleaning frequencies
- Clear, colourless liquid
- Frost resistant
- Contains alcohol for a durable Solar Panel Coatings
- Can be applied from -25 °C to +200 °C

Self-Cleaning Solar Panel Coating Benefits

The self-cleaning hydrophobic solar panel coating benefits:

- Easy DIY application
- Self-cleaning glass effect keeps PV clean longer, maintaining efficiency and greatly reducing the need for expensive cleaning
- Improves PV efficiency in inclement weather leading to more electricity being produced.
- Repels the water more quickly than non-coated hydrophilic surfaces such as the "self-cleaning" glass installed with typical PV panels
- Is resistant to salty air
- Reduces the growth of micro-organisms and bacteria
- Prevents bird fouling and tree sap from sticking to the surface
- Dust and dirt are washed away with rainwater
- Can be applied on hot surface (up to 200°C)
- Reduces cleaning frequency saving energy, time and cost
- Long durability – 3-4 years

Magic Solar Coat provides a non-stick, invisible performance coating using advanced silane coupling agents and the purest silicate particles to provide a long lasting durable layer of protection. PV collector glass surfaces will no longer need regular cleaning, water and debris will no longer stick on the surface.

Application: Magic Solar Coat should be applied in accordance with the supplied installation guidelines. NanoMagic cannot be held responsible for the product not performing correctly if these guidelines are not followed exactly. NanoMagic cannot be held responsible for the effects of applying Magic Solar Coat to surfaces/materials not directly approved by us. NanoMagic cannot be held responsible for any damages or losses caused by the incorrect application of Magic Solar Coat.

PV Solar Panel Protective Shield

- ✓ Self-cleaning action
- ✓ Durable protection
- ✓ Non-toxic
- ✓ Efficient coverage
- ✓ Easy application
- ✓ Can be applied on hot surface
- ✓ Hydrophobic effect
- ✓ Nano-Tech coating
- ✓ Cost effective
- ✓ Resistant to salt
- ✓ Eco-friendly
- ✓ Invisible shield
- ✓ Non-sticky
- ✓ Best quality
- ✓ No VOC
- ✓ ROI 3-4 years



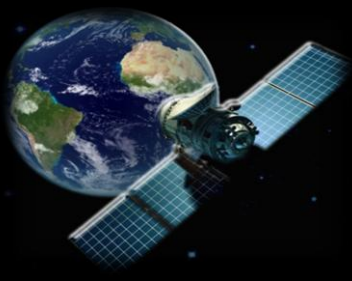
NANOMAGIC PRODUCTS:

- Magic IQ Coat
- Magic Glass Coat
- Magic Atomiser
- Magic Textile Coat



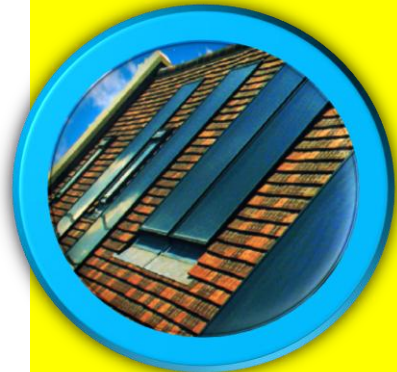
NANOMAGIC
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MAGIC SOLAR COAT SiO_2

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Applying Magic Solar Coat

Preparation

For the application you will require:

- **Magic Solar Coat**
- Cleaning agent such as Isopropyl alcohol
- Disposable 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 isn't hot, 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 solar glass surface. All cleaning detergents should be thoroughly rinsed away and the surface manually or naturally left to dry.

Application Instruction

Sponge or cloth application

1. Do not apply on glass hotter than 200°C
2. Clean the glass thoroughly with cleaning agent
3. Rub the glass surface dry with a clean dry cloth.
4. Pour liquid on the non-woven fabrics or sponge. Make liquid fill in non-woven fabric, or sponge, and then evenly wipe on glass surface, Form a uniform wetting liquid film on the surface.
5. **Please note: Apply one time only. Don't wipe back and forth.**
6. Approximately 20-25ml/m² should be applied.

Spray application

1. Please don't apply during high windy weather.
2. Spray with air brush, or spray bottle, spray gun (0.3mm is recommended),
3. Spray evenly on the glass forming uniform wetting film on the glass surface
4. Leave to dry. Keep away from water for 2 hours.

Maintenance

Once the application is complete the hydrophobic effects can be seen almost immediately and over the period of 2 hours the curing process will be complete. For regions with low rain fall, rinsing the treated surfaces down will be recommended once every 6 months to dislodge any dry dirt particles which may have gathered on the surface.

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