

Technical Data Sheet

SolarSharc® G2

DESCRIPTION:

SolarSharc® is a transparent, durable, easy-clean coating that aims to avoid the accumulation of dirt on substrates. Due to its nature, it is suitable for situations where it is required to keep the transparency. It is specially designed to coat glass of PV modules to avoid the accumulation of dirt and dust and improve the efficiency of the system. However, it could be applied to another substrate such as: metal (aluminium, steel, stainless steel), polyurethane, epoxy or polyester paints.

INSTRUCTIONS OF USE

The product should be applied following the indications below.

SUBSTRATE PREPARATION

Before application of the coating solution, the surface must be completely clean and dry. Clean the substrate with an alcohol solution and leave to dry before deposition of the coating. Additional blow dry with compressed air is recommended to ensure the surface is completely dry and clean. The substrate must be at a temperature between 5-30°C.

APPLICATION:

Application tool/method:

SolarSharc® is suitable to be applied with different methods offering several options to adapt to specific situations.

Wipe-coating	The product could be applied with a microfiber cloth for glass. This is the most suitable method for retrofit application. Decant the quantity that will be used in an applicator container.
Dip-coating	The coating could be applied via dip-coating. The product should be deposited in an application container; the substrate is immersed in it. It is recommended to perform the immersion at a constant speed to obtain a more uniform coating.
Spray-coating	The product is also suitable for spray deposition: <u>Spray conditions:</u> Gravity spray gun HVLP-compressed air Working pressure: ca. 2 – 3 bar Nozzles: 1-1.3mm Distance to the surface: 15-20cm

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Application conditions:

SolarSharc® coating must be applied at ambient temperature and relativity humidity of 30-70%. The process must be done in dry conditions, if it is applied in open area, never do it in rain. Direct sunlight must be avoid, it could affect the film formation and final properties.

Curing conditions

The recommended curing conditions for fully effective finish are:

- Room temperature: 3-5 days
- 85°C, 60% humidity: 1 day

The coating would be tacky free cured after 8 hours at the specification above.

PROPERTIES

Solarsharc coating properties:

- Easy to clean surface
- Clear coating
- PV modules protection against dust and dirt accumulation.
- Easy to apply solution
- High weather resistance
- Flourine-free product

Physical and chemical properties

Specifications

Non-volatile content	20-40% by weight
Active component	SMS35 silica
Binder component	Organic polysilazane
Solvent based	n-butyl acetate
Appearance	Colourless or with a slight blue colouring