

Product Description

ecotio₂[®] Premium G is a water based, single component, transparent, nano-titanium dioxide photocatalyst coating that utilises natural sunlight and rain to perform self-cleaning of the external surfaces.

Intended Uses

Specifically designed for use on high end commercial and residential, education assets, retail outlets and showrooms, leisure and solar where superior appearance and reduced maintenance costs are important. Suitable substrates include glass (windows, fencing, glass roofing and balconies), solar panels, stainless steel and mirrors.

Developed for superior transparency and high photocatalyst activity. ecotio₂[®] Premium G is applied directly to clean substrate imparting multiple benefits including self-cleaning, air purifying, deodorising, anti-fungal and anti-bacterial and anti-static to substrates listed above. On Solar Panels, the major benefit of the self-cleaning property is extra power generation. The ecotio₂[®] coated surface is photo oxidising when exposed to daylight, so will neutralise organic pollutants, soot, oils and smog that collide or deposit on this coated surface. Organic growths such as mould and black algae streaking will be inhibited.

The use of ecotio₂[®] Premium G keeps the exterior looking clean, significantly reduces use of cleaning chemicals and water (improved sustainability), reduces the life cycle cleaning costs, and improves health and safety by greatly reducing the need for personnel to assess externals of structures for maintenance.

Practical Information

Product Code	C031G
Colour	Clear liquid and highly transparent when dry
Gloss	Not applicable
Theoretical Coverage	15-25 g/m ²
Method of Application	HVLP Spray
Density	1.0 kg/m ³

Drying Time		Overcoating interval with self	
Temperature	Touch Dry	Minimum	Maximum
20°C (68°F)	20 mins	20 mins**	12 hours

**Practical coverage, above, is based on 30% loss factor using HVLP spray equipment, but loss factors are dependent on many influences including weather conditions, porosity of substrate, application method and parameters, skill of applicator etc. **see application guide.*

Regulatory Data

Flash Point (Typical)	Not applicable
VOC	<1 g/ltr

Surface Preparation

Rinse area with clean water. Add a small amount of cleaner (ecotio₂[®] Treat G - T012G) and in combination with orbital sander (fitted with aluminium abrasive pad), carefully remove all hydrophobic containments. Then thoroughly rinse off with clean water. (Note: too much cleaner will make removal more difficult).

The surface must be 100% hydrophilic, so repeat the cleaning steps above until there are no more visible hydrophobic containments and the water runs off the glass in a uniform manner.

NOTE: Cleaning the inside of the glass assists in visible checks on exterior cleanliness.

Application

Spray Equipment

Electric HVLP spray equipment with a fine tip is the preferred for thin film control and to minimise loss factors. Tip size between 0.5mm to 0.8mm as viscosity of products is that of water. Do **NOT** thin. Application by airless spray equipment, brush and roller are not suitable for application of ecotio₂[®] Premium G as the product needs to be applied evenly and not have runs or high areas to have superior transparency. Care should be taken not to apply a too heavy coat in a single pass to prevent runs and overbuild. Avoid spraying in high wind or on rain effected wet surfaces or when rain is expected within 6 hours.

Work Stoppages

Do not allow material to remain in hoses, guns or spray equipment for extended periods. Thoroughly flush all equipment with clean water.

Clean Up

Clean all equipment immediately after use with clean water. Use clean water only. All surplus materials and empty containers should be disposed of in accordance with appropriate regional regulations/legislation.

Product Characteristics

This technical datasheet provides general guidance on the use of ecotio₂[®] Premium G. Specific project requirements will be dependent upon the substrate type, substrate condition, service end use and environmental conditions. Always consult Photocatalyst Coatings to confirm that ecotio₂[®] Premium G is suitable for the intended end use. Refer to care and maintenance procedure if the substrate requires cleaning. Especially, do not clean with ionic detergent or chemicals.

Storage

Products should be stored in their sealed containers until use. When products are on site store in a cool place in the shade. Store excess products in an air-conditioned environment regulated between 5-25°C. Do not return excess products to container, measure out what you require and dispense only what is required for the job at hand. Do not freeze or refrigerate below 5°C.

Systems Compatibility

ecotio₂[®] Premium G should be applied directly to a freshly cleaned substrate. Suitable surface cleaners include:

- ecotio₂[®] Treat G

Please refer to specific TDS for more information of the above product or contact Photocatalyst Coatings for more information.

Safety Precautions

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given on this sheet, the Safety Data Sheet and the container(s) and should not be used without reference to the Safety Data Sheet (SDS) which are available from our website on the Internet (www.ecotio2.com) or on request. Ensure you contact Photocatalyst Coatings if you require any information before starting application.

Additional Information

Shelf Life: 12 months when stored in dark or low light conditions between 5-25°C (ideally this product should be stored in an air-conditioned environment).

Pack Size: 10 kg pack

Shipping Weight (typical): 10.5 kg

Further information regarding industry standards, terms and abbreviations used in this data sheet can be found in the following documents available at www.ecotio2.com:

- ecotio₂[®] Premium G Safety Data Sheet
- Application Guidelines – For Glass & Solar Panels
- Care and Maintenance Procedure for Glass

The information on this data sheet is not exhaustive, please contact us for more information. All products supplied and technical information given are subject to our Conditions of Sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is liable to modification from time to time in the light of experience and our policy of continuous improvement. It is the user's responsibility to check that this data sheet is current prior to using the product. ecotio₂[®] and all products mentioned in this publication are registered trademarks.