

# Technical Data Sheet ecotio<sub>2</sub>® Premium E

High Performance Photocatalyst Coating

# **Product Description**

ecotio<sup>2®</sup> Premium E is a highly transparent water based, single component, 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, transportation infrastructure and iconic assets where superior appearance and reduced maintenance costs are important. Suitable substrates include off-form concrete, painted surfaces, brickwork, masonry and ECOTONE coated surfaces.

Used as part of a coating system imparting multiple benefits including self-cleaning, air purifying, anti-carbonation, deodorising, anti-fungal and anti-bacterial, UV protection and anti-static to substrates listed above. (NOTE: a suitable ecotio<sup>®</sup> sealer MUST be applied prior to ecotio<sup>®</sup> Premium E photocatalyst).

The ecotio<sub>2</sub><sup>®</sup> 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 ecotio<sub>2</sub><sup>®</sup> coating increases the life of the asset, keeping the exterior looking better for longer and reduces the life cycle coats by extending the time before major maintenance.

### **Practical Information**

Product Code	C035E	
Colour	Transparent when dry	
Gloss	Not applicable	
Theoretical Coverage	30-40 g/m <sup>2</sup> (*Note: Allow appropriate loss factors -see below)	
Method of Application	HVLP spray equipment (recommended)	
Density	1.03 kg/m³	

Drying Time		Overcoating interval with self	
Temperature	Touch Dry	Minimum	Maximum
20°C (68°F)	10 mins	20 mins**	12 hours
Practical coverage will vary as loss i	factors are dependent on many influen	ces including weather conditions, porosit	y of substrate, application method and

\*Practical coverage will vary as 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/l

### **Surface Preparation**

ecotio<sub>2</sub><sup>®</sup> Premium E is a topcoat and is used in a 2-part system.

Please refer to surface preparation details of the undercoat as the undercoat selection is dependant on the substrate and end use.

### TDS - ecotio2<sup>®</sup> Premium E

# Application

#### **Spray Equipment**

Brush is not recommended, use for small areas only. Electric HVLP spray equipment with fine tip preferred for minimising loss factors. Tip size between 0.5mm to 0.8mm as viscosity of products is that of water. Do NOT thin. Airless spray equipment can be used for faster application however loss factors will generally be higher. Care should be taken not to apply a too heavy coat in a single pass to stop runs and overbuild. Avoid spraying in high wind or on rain effected wet surfaces or when precipitation 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. It is good working practice to periodically flush out spray equipment. 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 ecotio<sub>2</sub><sup>®</sup> Premium E. 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 ecotio<sub>2</sub><sup>®</sup> Premium E is suitable for the intended end use.

#### 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

Compatible products for ecotio<sub>2</sub>® Premium E:

ecotio<sub>2</sub><sup>®</sup> Sealer E10

 $ecotio_2^{
entropy}$  Sealer S

ecotio<sub>2</sub>® Sealer E

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
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Shipping Weight (typical):

10.95 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:

ecotio<sub>2</sub><sup>®</sup> Premium E Safety Data Sheet

Application Guidelines – For External Buildings

The information on this data sheet is not exhaustive, please contact us for more information. All products supplied and technical advice 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<sup>®</sup> and all products mentioned in this publication are registered trademarks.