

Technical Data Sheet

Edition 15.2025
OxiGen SHIELD PLUS

PRODUCT DESCRIPTION

OriGen® OxiGen SHIELD PLUS is a graphite-based conductive paint developed to protect against high and low-frequency electromagnetic radiation. SHIELD PLUS is manufactured using CACO₃® Technology, resulting in a high-quality, highly durable product. It reduces electromagnetic pollution and crosstalk or interference between wireless networks in different rooms, thereby improving the productivity of RFID and WiFi systems.

PRODUCT FEATURES

- High hiding power
- Good adhesion; does not form a film
- Highly breathable
- Protection against high-frequency radiation
- Protection against low-frequency electric fields
- Attenuation of 32 dB at 900 MHz (IEEE 299:2006)
- Free of metallic particles
- Free of VOC emissions

TECHNICAL PROPERTIES

Property	Value	Units
Specific gravity	1.15 ± 0.05	g/cm ³ (~9.6 lb/gal)
pH	7.5 ± 1	
Viscosity	60–70	KU (Krebs units)
Solids content	40 ± 5 %	
Binder nature	Bio Resin	
Appearance	Thick liquid	
Finish	Matte	
VOC content	<0.1 g/L	

COVERAGE

4.5–6.5 m²/L (2 coats)

Approx. 180–260 ft² per gallon (2 coats)

Coverage depends on substrate type, condition, tools, and application method. Exact consumption should be determined by an on-site sample.

AVAILABLE COLORS

Black (due to graphite content)

SURFACE PREPARATION

The substrate must be dry, clean, and free of dust, salts, and imperfections.

Poorly adhered particles from previous paint should be removed manually or with pressure washing. Ensure the substrate texture is uniform.

If algae, mold, fungi, or other impurities are present, thoroughly clean using appropriate products to completely remove them.

For absorbent substrates, apply the mineral sealer MinerGen.

For wood, metal (free of corrosion/oxidation), or non-porous substrates (such as tiles), apply a primer as a bonding bridge.

Old paint films that prevent vapor diffusion or are not firmly adhered must be removed by stripping agents or mechanical means.

Mineral substrates must be at least 28 days old. Do not apply on surfaces in permanent contact with water.

In highly humid or polluted areas, apply a water-repellent sealer to minimize water and impurity absorption.

If any substrate pathology is not covered here, please contact the Technical Department.

GENERAL GUIDELINES

- Protect surfaces not to be treated (woodwork, glass, stone, etc.).
 - Immediately wash off splashes with water until completely removed.
 - Protect treated surfaces from rain for at least 4 days.
 - Do not mix with other products to preserve specific product properties.
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APPLICATION GUIDELINES

Application Surfaces:

Suitable for application on prepared surfaces as described above.

Application Conditions:

Ambient and substrate temperatures should be between 41°F and 104°F (5°C to 40°C). Do not apply under direct sunlight, on sun-heated surfaces, or if rain is expected within 24 hours of application.

Protect surfaces from sun, wind, and rain during and after application.

PRODUCT PREPARATION

Stir thoroughly and dilute with clean water at 5–10% of the product's weight (approx. 0.8–1.3 cups of water per liter of product).

PRODUCT APPLICATION

Apply SHIELD PLUS by brush, roller, or spray gun (nozzle $\geq$ 435).

Apply 2 uniform coats. Excess product per coat may cause micro-cracks. For very exposed façades, 3 coats are recommended.

For technical assistance, contact the Technical Department at info@origenpaints.com.

DRYING TIMES

The second coat can be applied after 2–4 hours (at 73°F and 50% relative humidity).

Longer drying times are required in higher humidity or lower temperatures.

Full drying occurs 24 hours after application.

TOOL CLEANING

Clean tools immediately after use with warm water.

PACKAGING / FORMATS

Available in 1.06 gallon (4L) and 3.96 gallon (15L) containers.

STORAGE

Store in original, tightly sealed containers in a cool place. Protect from freezing and direct sunlight.

Maximum storage time: 18 months from manufacturing date.

WASTE MANAGEMENT

Refer to the Safety Data Sheet and comply with local regulations.

Containers are made of recycled plastic.

Protect the environment: do not dispose of residues down drains; use the nearest recycling point.

RESPONSIBLE USE

Reduce paint waste. Reuse leftover product whenever possible.

SAFETY INSTRUCTIONS

Consult the most recent Safety Data Sheet for safety, physical, ecological, and toxicological information.

Avoid direct skin contact. Use protective gloves and goggles.

Keep out of reach of children.

DISCLAIMER

The values and characteristics shown are the result of extensive development and practical experience.

Application recommendations, verbal or written, are advisory to assist in product selection and do not establish a contractual relationship.

Users must verify product suitability for their intended use.

General construction standards apply.

We reserve the right to modify the product or its application methods.

This edition supersedes all previous versions.