TECHNICAL DATA SHEET

GrafGen™ Int/Ext Semi-Gloss (Midshine)

Semi-gloss finish

EDITION 30.09.2026 · REV. 3

01 PRODUCT DESCRIPTION

OriGen GrafGen™ Int/Ext is a breathable exterior/interior paint, formulated with eco-design concepts. Available in a washable semi-gloss finish, it features proprietary $CaCO_3$™ Technology (Graphene Technology) and a next-generation Bio-Based (VAE) formulation that delivers a durable, long-lasting coating with protection against fungi and algae. Suitable for both new construction and repainting, GrafGen is ideal for surfaces exposed to high humidity. Its formula is designed to minimize its carbon footprint, making it well suited for residential applications, indoor and outdoor decoration, and sustainable construction projects.

02 KEY FEATURES

- Class 1 scrub resistance (EN 13300) · ASTM D2486 (>10,000 cycles)
- High coverage capacity
- Excellent adhesion; non-film-forming
- Highly breathable and water-repellent
- Prevents condensation
- VOC content: < 1 g/L (ISO 11890-2)
- Solvent- and microplastic-free
- Formula designed with circular-economy concepts
- Titanium dioxide content < 5%
- Organic content < 5%

03 TECHNICAL PROPERTIES

PROPERTY	VALUE
Specific Gravity	**1.5 ± 0.05 g/cm³**
pH	**9 ± 1**
Viscosity	**100–120 KU**
Solids by Weight	**70 ± 5%**
Base	**Bio-Based (VAE)**
Appearance	**Dense liquid**
Finish	**Semi-gloss**
VOC Content	**< 1 g/L**

PROPERTY	VALUE
Reaction to fire	**B-s1, d0 (UNE-EN 13501-1) · European classification**

04 COVERAGE

8–10 m²/L
1 COAT

325–405 sq.ft/gal
1 COAT

Actual coverage depends on the surface type and condition, tools used, and application method. On-site testing is recommended to determine precise consumption.

05 APPLICATION SURFACES

- Plaster and gypsum
- Fillers and mineral-based substrates
- Prefabricated panels
- Uncoated wallpaper
- Brick, perlite
- Other porous or mineral surfaces

06 SUBSTRATE PREPARATION

- Ensure the substrate is clean, dry, and free from dust, salt, grease, and loose paint.
- Remove previous coatings that are not well-adhered using mechanical or pressurized water cleaning.
- If mold, algae, or mildew are present, clean thoroughly with specific biocidal products.
- For absorbent surfaces: Apply *Primer L44*.
- For wood, rust-free metals, or non-porous surfaces (e.g. tiles): Apply a bonding primer (*All Terrain 4x4 Primer*).
- Paints forming impermeable films must be stripped or mechanically removed.
- Mineral substrates must be at least **28 days cured**.
- Avoid applying on surfaces in permanent contact with water.
- In high humidity or contaminated environments, use a water-repellent sealer to reduce moisture and pollutant absorption.
- For unusual pathologies or special conditions, consult the Technical Department.

07 APPLICATION CONDITIONS

- Ambient and surface temperature: **41°F to 104°F**
- Do not apply in direct sunlight or on overheated substrates.
- Exterior: protect from rain and dew for **48 hours** after application.

08 PRODUCT PREPARATION

- Stir thoroughly before use.
- Reduce with **5–10% clean water by weight** (approx. **10–19 fl oz per gallon**).

09 APPLICATION METHOD

- Apply a minimum of two uniform coats (a third may be needed depending on substrate, color or finish), making sure to keep a wet edge to prevent visible lap lines. Work one wall at a time, cutting in and rolling with the same dilution ratio throughout. Roll as close to the edges as possible to avoid "picture framing." Avoid applying the product too heavily, as this can slow curing and lead to micro-cracks. Because of their mineral base, these paints perform best when they are well rolled and worked into the surface, resulting in a smooth, consistent, and rich finish.

> ⚠️ Avoid excess product per layer to prevent micro-cracking.

- Recommended tips: **315-317 or 210-312**
- Recommended pressure: **1800–2000 psi**

For technical inquiries: marketing@origenpaints.com

10 DRYING & CURING TIMES

- **Second coat:** After 2–4 hours at **77°F** and 60% relative humidity
- **Full drying:** After 24 hours
- **Complete curing:** After 10 days — do not clean or scrub before this time to ensure optimal hardness and durability.

Drying time may vary with temperature and humidity.

11 TOOL CLEANING

Clean all tools with **warm water** immediately after use.

12 PACKAGING FORMATS

- **1 gal (128 fl oz)**
- **5 gal (640 fl oz)**

13 STORAGE CONDITIONS

- Store in original, sealed packaging
- Keep in a cool, dry place, away from frost and direct sunlight
- Maximum shelf life: **24 months** from the production date

14 WASTE MANAGEMENT

- Follow local regulations and consult the Safety Data Sheet (SDS)
- Packaging is made of recycled plastic
- Do not dispose of waste through drains – use local recycling centers
- Reuse leftover paint whenever possible to reduce environmental impact

15 SAFETY INSTRUCTIONS

- Refer to the latest Safety Data Sheet (SDS) for physical, toxicological, ecological, and safety data
- Keep out of reach of children

The technical values and recommendations provided are based on extensive laboratory testing and field experience. These are guidelines only and do not constitute a binding legal warranty. The end user must verify the product's suitability for each specific case and comply with applicable building standards and regulations. OriGen reserves the right to update this information without prior notice. This edition supersedes all previous versions.