

SIGMAPRIME®

Universal primer - increased environmental compliance





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PPG Protective & Marine Coatings (PPG) is a world leader in protective and marine coatings.

Our global capabilities and respected protective coatings brands enable us to provide our customers with exceptional products, performance and service. Our proven and trusted products protect a wide range of assets for the most demanding markets and environments, including:

- Civil Infrastructure
- Marine
- Mining
- Offshore
- Petrochemical
- Power
- Rail

PPG has the scale and resources to deliver outstanding support with well-established operations in over 60 countries. Continuous development ensures that we provide optimum solutions for asset owners, contractors, fabricators and applicators across the globe, helping our customers to meet the challenges they face today and tomorrow.

Experience, innovation and integrity – that is what makes PPG the ideal coatings partner.



Driving increased efficiency into your business

Marine coatings are recognized as an essential factor in the service life and operational profitability of most forms of shipping. Consequently, they have now become a crucial consideration, from the new-build design stages onwards.

Such is the importance of using the most suitable marine coating, that the success or failure of coatings in service will have a significant influence on a ship's operational profitability, and overall return on investment.

SIGMAPRIME coatings are the solution – a unique range of multi-purpose anticorrosives that meet the demands of process, speed and environmental compliance, without compromising the quality of the coating performance.

SIGMAPRIME coatings are designed to simplify production at the new-build stage, and provide long-term performance in service. In addition, they can be applied to almost all vessel areas, in virtually all temperatures, throughout the year.

Proven performance

The SIGMAPRIME range consists of high-quality, multipurpose epoxy anticorrosives that have been specifically designed to suit modern shipyard building practices and to ensure excellent long-term corrosion protection.

When it comes to coating critical areas of a vessel, both owners and shipyards want to be sure that they are getting the most effective product with an established, proven track record. It is clear that our customers recognize the value of using *SIGMAPRIME*, with over 50 million m² (538 ft²) applied worldwide.

Applied in two layers, the SIGMAPRIME coating serves as a proven high-quality, water ballast tank system. As evidence of its success, it was applied on the water ballast tank of the very first IMO PSPC type-approved vessel.

One primer concept for all vessel areas

- Water ballast tanks
- Underwater hull
- Deck
- Superstructure
- Topsides
- Cargo holds
- Cargo tanksInteriors

One primer fits all

The SIGMAPRIME range offers excellent water and corrosion resistance when applied to steel and non-ferrous metals, exhibiting excellent adhesion, flow and wetting properties, as well as outstanding crack resistance and edge retention.

It provides exceptional anticorrosive protection due to its excellent adhesive qualities on shop primer, steel (blasted or mechanically pre-treated), aluminum, stainless steel, galvanized steel and hydro-jetted surfaces

The SIGMAPRIME universal primer can also be overcoated with virtually all other coating types, such as epoxy, polyurethane, acrylic, alkyd, chlorinated rubber, vinyl and fire retardant.

Shipyard benefits

- · Simplicity:
 - Reduced number of products
 - Simplified specification
 - Easier ordering and stock control
- Efficiency improvement:
 - Increased production speed
 - Short recoating time
 - Reduced stocks
 - Improved application control
 - Wide application window
 - Less waste
- Increased environmental compliance
 - Reduced consumption/wastage
 - Supports yard solvent emission reduction

Owner on-site benefits

- Quality assurance:
 - Simplified specification/inspection routine
 - Increased familiarity with coatings and systems, improving quality of application
- Efficiency improvement:
 - Wide application window
 - Improved application consistency
 - Less building schedule disruption

Owner in-service benefits

- Performance:
 - Long-term anticorrosive protection
- Efficiency improvement:
 - Simplified maintenance schemes
 - Reduced maintenance costs
- · Simplicity:
 - Reduced number of products
 - Easier ordering and stock control





SIGMAPRIME 200

Two-component, multi-purpose, anticorrosive epoxy system. Low-temperature version delivers excellent performance when applied down to -10°C (14°F).

- One coating for all vessel areas
- Pure epoxy coating
- Can be specified up to 200 μm (7.9 mils) DFT in one single coat
- VOC emissions maximum 430 grams per liter (3.59 lb per US gallon)
- Exceptional anticorrosive performance
- Excellent adhesion to steel, shop primer, galvanized steel and non-ferrous metals
- Low-temperature version available
- · Proven crack resistance
- Good edge coverage

SIGMAPRIME 700

70% High-solids, two-component, multi-purpose, anticorrosive epoxy system. Low-temperature version provides excellent performance when applied down to -10°C (14°F).

- One coating for all vessel areas
- Pure epoxy coating
- Can be specified up to 200 μm (7.9 mils) DFT in one single coat
- Reduced VOC emissions maximum 313 grams per liter (2.61 lb per US gallon)
- Exceptional anticorrosive performance
- Excellent adhesion to steel, shop primer, galvanized steel and non-ferrous metals
- · Low-temperature version available
- Proven crack resistance
- Enhanced edge coverage

SIGMAPRIME 800

80% High-solids, two-component, multi-purpose, anticorrosive epoxy system. Low-temperature version provides excellent performance when applied down to -10°C (14°F).

- One coating for all vessel areas
- Pure epoxy coating
- \bullet Can be specified up to 250 μm (9.8 mils) DFT in one single coat
- Suitable for 'bulk supply' and twin-feed application
- Reduced VOC emissions maximum 257 grams per liter (2.14 lb per US gallon)
- Exceptional anticorrosive performance
- Excellent adhesion to steel, shop primer, galvanized steel and non-ferrous metals
- Low-temperature version available
- Proven crack resistance
- Enhanced edge coverage



Fingerprint quality assured

The global nature of the shipping business now demands worldwide supply. Providing marine coatings to the shipping industry usually requires local manufacture, often using local raw materials. For coating systems in critical areas, it is vitally important that these coatings are identical to those originally specified, together with track records and approvals (such as DNV/Marintek).

The composition of the *SIGMAPRIME* range, regardless of production location, is strictly controlled and all *SIGMAPRIME* product formulations have been fingerprinted by the DNV laboratories in Bergen, Norway.



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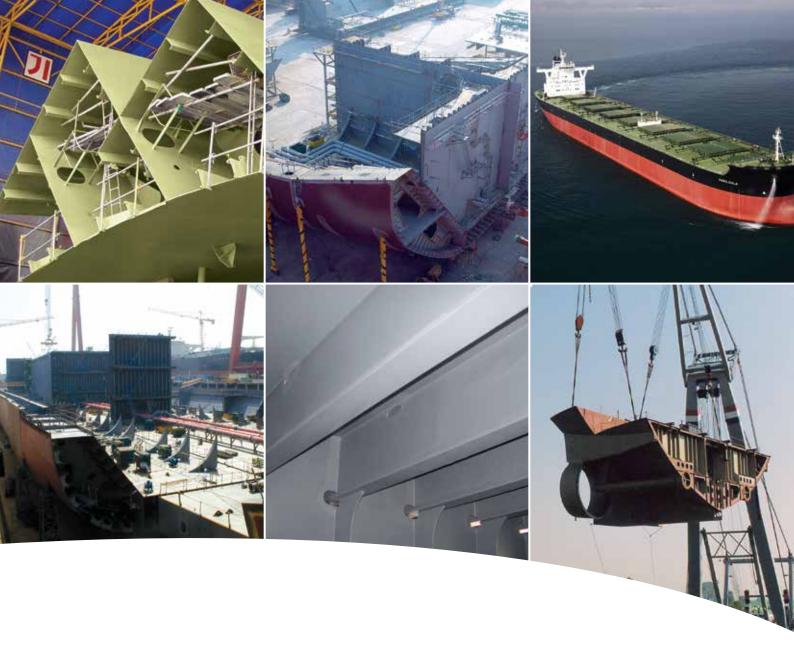
- Two-component, multi-purpose, anticorrosive epoxy system
- Can be specified up to 200 µm (7.9 mils) DFT in one single coat

SIGMAPRIME 700

- 70% High-solids, two-component, multi-purpose, anticorrosive epoxy system
- $\bullet\,$ Can be specified up to 200 μm (7.9 mils) DFT in one single coat

SIGMAPRIME 800

- 80% High-solids, two-component, multi-purpose, anticorrosive epoxy system
- $\bullet\,$ Can be specified up to 250 μm (9.8 mils) DFT in one single coat



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