



# SIGMASHIELD™ 880

Abrasion-resistant, surface-tolerant, multipurpose epoxy for severe environments



**PPG Protective &  
Marine Coatings**

Bringing innovation to the surface.™



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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.**



## The new standard for protection in extreme environments

Given the constantly increasing drive for enhanced performance and improved cost efficiency, protecting valuable assets in extreme environments with the correct coating choice is more important than ever. Now, thanks to *SIGMASHIELD* 880, a new coating from PPG, asset owners and engineers can achieve a new standard in the protection of valuable assets while saving significantly on cost through efficient application and improved performance.

### **Multipurpose, superior abrasion resistance, tolerant surface preparation, extended service life**

*SIGMASHIELD* 880 is an abrasion-resistant, surface-tolerant, multipurpose epoxy designed specifically for application in the world's most challenging environments. *SIGMASHIELD* 880 represents a new standard in the protective coatings industry combining superior performance in:

- Single-coat application
- Faster dry-time
- Abrasion resistance

*SIGMASHIELD* 880 provides savings by reducing the time and expense associated with surface preparation as well as providing greater application efficiency and enhanced finish quality.

# Industry-leading performance properties

Customer benefits	Product features
Long service life, severe-use capability	Superior abrasion- and impact resistance
	Outstanding seawater and corrosion resistance
	Improved cathodic disbondment protection
	Excellent chemical splash and spill resistance
Minimize downtime, shorten return-to-service time	Shorter dry-to-touch time
	Shorter time for seawater exposure and immersion
	Continues to cure upon immersion
Efficient application	Better surface tolerance (suitable for damp- or wet-blast clean substrates)
	Extended recoat window
	High-film thickness in one coat
Provides aesthetic options	Available in a range of colors





## Trusted and tested

*SIGMASHIELD 880* is the latest addition to the extensive range of *SIGMASHIELD* epoxy coatings that have consistent, proven performance in the harshest service environments.

*SIGMASHIELD 880* provides industry-leading performance as confirmed by both internal and external testing laboratories.

### Third-party certifications:

*SIGMASHIELD 880* – demonstrated compliance with international standards.

NORSOK M501 Revision 5 System 7

ISO 12944-6 C5M High  
 ISO 12944-6 Im3 High  
 (including hydrojetted substrate)

**SIGMASHIELD 880 outperforms the industry-leading products in several key ASTM and ISO performance tests**

### Benefit of two coats – in a single coat



**Top image:** Faster dry-time

**Middle image:** Faster immersion time

**Bottom image:** Excellent crack resistance at high-film thickness



## A true multipurpose coating

### Markets and applications

Like other coatings in the *SIGMASHIELD* family of reinforced products, *SIGMASHIELD* 880 is engineered and formulated to resist corrosion in a wide range of industries and applications. As the product can be rapidly immersed and continues to cure after seawater immersion, it is particularly suited for structures exposed to tidal movement and surges, and for offshore splash zones.

### Infrastructure

- Caissons
- Pipework
- Decks and walkways
- Water and waste water facilities

### Mining

- Conveyors
- Slurry lines
- Sluice gates

### Offshore

- Splash zones
- Decks, walkways and topsides
- Helidecks
- Jackets and caissons

### Petrochemical

- Tank externals
- Pipework
- Jetties
- Pilings
- Walkways

### Power

- Condensate boxes
- Renewable energy applications

### Additional

- Cement manufacturing
- Pulp and paper
- Cooling towers
- Support structures
- Tidal areas

## Splash- and spill resistance

In addition, *SIGMASHIELD* 880 exhibits good chemical resistance with splash- and spill resistance to the following materials:

- Ethanol
- Butanol
- Propanol
- 5% Potassium Hydroxide
- 5% Sodium Hydroxide
- 10% Sodium Chloride
- 10% Ammonia Solution
- Sodium Carbonate
- Iso-octane
- Toluene
- Xylene
- Butyl Acetate
- Unleaded gasolines
- MTBE
- Crude Oil
- Jet Fuel
- MIBK

## Application

Preparation: ISO – Sa2 or Sa2 1/2, SSPC SP6, ST3 or Pt3, hydrojetted to VIS WJ2/3 L  
Application: one coat 200–1000 micron/8–40mil

## Color

Available in a range of colors.



Surface preparation tolerance with excellent corrosion performance





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