



# New Guard Coatings Group

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This information is not exhaustive and it is the user's responsibility to ensure that this data sheet is the most current by contacting their local New Guard Coatings Group branch prior to using the coating/product.

[www.newguardcoatings.com](http://www.newguardcoatings.com)

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# SIGMASHIELD™ PRIME LT

## DESCRIPTION

Premium dry cargo hold product based on bi-phasic polymer composition delivering excellent Mechanical, Thermal and Corrosion protection

## PRINCIPAL CHARACTERISTICS

- 2-pack polymeric epoxy / amine providing kick-start cure and faster return to service
- Excellent anti-corrosive properties with excellent creep resistance
- Excellent abrasion and impact resistance
- Excellent gouging resistance at elevated temperatures

## COLOR AND GLOSS LEVEL

- Redbrown, gray
- Eggshell

## BASIC DATA AT 10°C (50°F)

Data for mixed product	
<b>Number of components</b>	Two
<b>Mass density</b>	1.5 kg/l (12.5 lb/US gal)
<b>Volume solids</b>	64 ± 2%
<b>VOC (Supplied)</b>	Directive 2010/75/EU, SED: max. 267.0 g/kg max. 399.0 g/l (approx. 3.3 lb/US gal)
<b>Recommended dry film thickness</b>	See spreading rate tables
<b>Theoretical spreading rate</b>	6.4 m <sup>2</sup> /l for 100 µm (257 ft <sup>2</sup> /US gal for 4.0 mils)
<b>Dry to touch</b>	3 hours
<b>Overcoating Interval</b>	See overcoating tables
<b>Full cure after</b>	7 days
<b>Shelf life</b>	Base: at least 24 months when stored cool and dry Hardener: at least 24 months when stored cool and dry

### Notes:

- See ADDITIONAL DATA - Spreading rate and film thickness
- See ADDITIONAL DATA - Overcoating intervals
- See ADDITIONAL DATA - Curing time

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## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Substrate conditions

- Surface must be free from grease, salts and any contamination
- Steel; blast cleaned to ISO-Sa2½, blasting profile 30 - 75 µm (1.2 - 3.0 mils) or according to ISO-St3
- Shop primed steel; pretreated to SPSS-Pt3
- Coated steel; hydrojetted to VIS WJ2L (blasting profile 30 - 75 µm (1.2 - 3.0 mils))

### Substrate temperature and application conditions

- Relative humidity during application and curing should not exceed 85%
- Substrate temperature during application and curing should be at least 3°C (5°F) above dew point

## INSTRUCTIONS FOR USE

### Mixing ratio by volume: base to hardener 80:20 (4:1)

- The temperature of the mixed base and hardener should be above 10°C (50°F), otherwise extra thinner may be required to obtain application viscosity
- Adding too much thinner results in reduced sag resistance and slower cure
- Thinner should be added after mixing the components

### Induction time

None

### Pot life

5 hours at 10°C (50°F)

Note: See ADDITIONAL DATA – Pot life

### Air spray

#### **Recommended thinner**

THINNER 91-92

#### **Volume of thinner**

0 - 5%, depending on required thickness and application conditions

#### **Nozzle orifice**

1.5 - 2.0 mm (approx. 0.060 - 0.079 in)

#### **Nozzle pressure**

0.3 - 0.4 MPa (approx. 3 - 4 bar; 44 - 58 p.s.i.)



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## Airless spray

### Recommended thinner

THINNER 91-92

### Volume of thinner

0 - 3%, depending on required thickness and application conditions

### Nozzle orifice

Approx. 0.53 - 0.74 mm (0.021 - 0.029 in)

### Nozzle pressure

15.0 MPa (approx. 150 bar; 2176 p.s.i.)

## Brush/roller

### Recommended thinner

No extra thinner is necessary

### Volume of thinner

Up to 5% THINNER 91-92 can be added if desired

## Cleaning solvent

THINNER 90-53

## ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
100 µm (4.0 mils)	6.4 m <sup>2</sup> /l (257 ft <sup>2</sup> /US gal)

Overcoating interval for DFT up to 150 µm (6.0 mils)					
Overcoating with...	Interval	0°C (32°F)	5°C (41°F)	10°C (50°F)	15°C (59°F)
itself, SIGMASHIELD MTC, SIGMASHIELD 420	Minimum	16 hours	10 hours	6 hours	4 hours
	Maximum	2 months	2 months	1 month	1 month

Note: Surface should be dry and free from any contamination

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## Curing time for DFT up to 150 µm (6.0 mils)

Substrate temperature	Dry to touch	Dry to handle	Full cure
0°C (32°F)	8 hours	17 hours	12 days
5°C (41°F)	5 hours	11 hours	9 days
10°C (50°F)	6 hours	6 hours	7 days
15°C (59°F)	2 hours	4 hours	5 days

Note: Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)

## Pot life (at application viscosity)

Mixed product temperature	Pot life
10°C (50°F)	5 hours

## SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets
- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes

## WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

## REFERENCES

• CONVERSION TABLES	INFORMATION SHEET	1410
• EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411
• SAFETY INDICATIONS	INFORMATION SHEET	1430
• SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD	INFORMATION SHEET	1431
• DIRECTIVES FOR VENTILATION PRACTICE	INFORMATION SHEET	1434
• CLEANING OF STEEL AND REMOVAL OF RUST	INFORMATION SHEET	1490
• SPECIFICATION FOR MINERAL ABRASIVES	INFORMATION SHEET	1491
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650



# SIGMASHIELD™ PRIME LT

## WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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