

# PPG SIGMAPRIME® 700 HSV CARGO HOLD

## DESCRIPTION

Universal High Solid Epoxy Topcoat for Dry Cargo Hold

## PRINCIPAL CHARACTERISTICS

- Part of SIGMAPRIME series
- High solid pure epoxy topcoat for Dry Cargo Hold
- Good flow and wetting properties
- Cures at temperatures down to 5°C (41°F)
- Good abrasion and impact resistance
- Good gouging resistance at elevated temperatures
- Good chemical resistance to a wide range of active dry bulk cargoes

## COLOR AND GLOSS LEVEL

- Redbrown

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
<b>Number of components</b>	Two
<b>Mass density</b>	1.5 kg/l (12.3 lb/US gal)
<b>Volume solids</b>	83 ± 2%
<b>VOC (Supplied)</b>	Directive 2010/75/EC, SED: max. 135.0 g/kg max. 199.0 g/l (approx. 1.66 lb/US gal) EPA Method 24: 174.0 g/l (1.5 lb/US gal)
<b>Recommended dry film thickness</b>	100 - 250 µm (4.0 - 10.0 mils) depending on system
<b>Theoretical spreading rate</b>	6.6 m²/l for 125 µm (266 ft²/US gal for 5.0 mils) 5.2 m²/l for 160 µm (211 ft²/US gal for 6.3 mils)
<b>Dry to touch</b>	3 hours
<b>Full cure after</b>	7 days
<b>Shelf life</b>	Base: at least 18 months when stored cool and dry Hardener: at least 24 months when stored cool and dry

Notes:

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



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## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Substrate conditions

- Surface must be free from grease, salts and any contamination
  - Coated steel; adhesion will be improved by mechanical pretreatment of the existing, aged coating system
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### Substrate temperature and application conditions

- Substrate temperature during application and curing should be at least 3°C (37°F) above dew point
  - Relative humidity during application and curing should not exceed 85%
  - Substrate temperature during application and curing should be above 5°C (41°F)
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## INSTRUCTIONS FOR USE

### Mixing ratio by volume: base to hardener 4:1

- The temperature of the mixed base and hardener should preferably be above 15°C (59°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
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### Pot life

2 hours at 20°C (68°F)

Note:

- See ADDITIONAL DATA - Pot life
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### Air spray

#### **Recommended thinner**

THINNER 91-92

#### **Volume of thinner**

0 - 15%, 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 - 10%, 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.)

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## **Brush/roller**

### **Recommended thinner**

No extra thinner is necessary

### **Volume of thinner**

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

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## **Cleaning solvent**

- THINNER 90-53
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## **ADDITIONAL DATA**

<b>Spreading rate and film thickness</b>	
<b>DFT</b>	<b>Theoretical spreading rate</b>
100 µm (4.0 mils)	8.3 m <sup>2</sup> /l (333 ft <sup>2</sup> /US gal)
125 µm (5.0 mils)	6.6 m <sup>2</sup> /l (266 ft <sup>2</sup> /US gal)

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Overcoating interval for DFT up to 160 µm (6.3 mils)						
Overcoating with...	Interval	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
itself	Minimum	20 hours	12 hours	6 hours	3 hours	2 hours
	Maximum	28 days	28 days	28 days	21 days	14 days

Note:

- Surface should be dry and free from any contamination

Curing time for DFT up to 160 µm (6.3 mils)			
Substrate temperature	Dry to touch	Dry to handle	Full cure
5°C (41°F)	12 hours	20 hours	21 days
10°C (50°F)	8 hours	14 hours	14 days
15°C (59°F)	6 hours	11 hours	7 days
20°C (68°F)	4 hours	7 hours	5 days
30°C (86°F)	2 hours	5 hours	5 days

Note:

- Adequate ventilation must be maintained during application and curing

Pot life (at application viscosity)	
Mixed product temperature	Pot life
15°C (59°F)	3 hours
20°C (68°F)	2 hours
30°C (86°F)	1.5 hours

## SAFETY PRECAUTIONS

- See Safety Data Sheet and product label for complete safety and precaution requirements
- 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 & 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.



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## REFERENCES

- Information sheet | Explanation of product data sheets
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## WARRANTY

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