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	
Number of components	Two
Mass density	1.5 kg/l (12.3 lb/US gal)
Volume solids	83 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 135.0 g/kg max. 199.0 g/l (approx. 1.66 lb/US gal) EPA Method 24: 174.0 g/ltr (1.5 lb/US gal)
Recommended dry film thickness	100 - 250 µm (4.0 - 10.0 mils) depending on system
Theoretical spreading rate	6.6 m^2/l for 125 µm (266 ft^2/US gal for 5.0 mils) 5.2 m^2/l for 160 µm (211 ft^2/US gal for 6.3 mils)
Dry to touch	3 hours
Full cure after	7 days
Shelf life	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 pretreatement of the existing, aged coating system

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)

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

Pot life

2 hours at 20°C (68°F)

Note:

- See ADDITIONAL DATA – Pot life

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.)

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)	8.3 m^2/l (333 ft^2/US gal)
125 µm (5.0 mils)	6.6 m^2/l (266 ft^2/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 and SIGMAPRIME series	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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