AMERCOAT® 90 S

DESCRIPTION

High-performance modified phenolic epoxy (90 Series)

PRINCIPAL CHARACTERISTICS

- High solids tank lining
- Excellent chemical resistance
- Suitable for cycling and long term continuous immersion service.
- Withstands continuous immersion in water up to 60°C (140°F)
- Recommended under thermal insulation on carbon steel or stainless steel up to 200°C (390°F)

Note: Contact your PPG representative for specific chemical resistance information

COLOR AND GLOSS LEVEL

- White, pearl gray
- Flat

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.4 kg/l (11.5 lb/US gal)
Volume solids	58 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 286.0 g/kg UK PG 6/23(92) Appendix 3: max. 348.0 g/l (approx. 2.9 lb/US gal)
Recommended dry film thickness	150 µm (6.0 mils) per coat
Theoretical spreading rate	3.9 m^2/l for 150 µm (155 ft^2/US gal for 6.0 mils)
Dry to handle	16 hours
Overcoating Interval	Minimum: 24 hours Maximum: 12 days
Shelf life	Base: at least 12 months when stored cool and dry Hardener: at least 12 months when stored cool and dry

Notes:
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time

AMERCOAT® 90 S

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Steel

- Abrasive blast cleaning is recommended with a surface profile of 40 – 70 µm (1.6 – 2.8 mils).
- Immersion: blast to Sa 3, ISO 8501-1 or SSPC SP-5.
- Remove all rust, dirt, moisture, grease or other contaminants from the surface

Note: Apply primer as soon as possible after surface preparation to prevent any contamination.

Concrete

- Dried for at least 28 days in good ventilation conditions
- Moisture content should not exceed 4.5%
- Concrete must be sound, dry, free from laitance and any contamination
- Rough surface; eventually abraded by power tool or diamond abrading tool

Substrate temperature and application conditions

- Surface temperature during application should be between 10°C (50°F) and 50°C (122°F)
- Surface temperature during application should be at least 3°C (5°F) above dew point
- Ambient temperature during application and curing should be between 10°C (50°F) and 43°C (109°F)

SYSTEM SPECIFICATION

- For use under thermal insulation do not exceed 200 microns (8 mils) dry film thickness

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 66.7:33.3 (2:1)

- Pre-mix base component with a pneumatic air mixer at moderate speeds to homogenize the container
- Add hardener to base and continue stirring until homogeneous
- The thinner should be added after mixing the two components
- Adding too much thinner results in reduced sag resistance and slower cure

Induction time

None

Pot life

4 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

AMERCOAT® 90 S

Repair
- Spot blast or power tool clean bare substrate to the requirements shown under surface preparation.
- Feather edges of intact coating.
- Remove dust, dirt and contamination before recoating.

Material temperature
Material temperature during application should be between 10°C (50°F) and 40°C (104°F)

Air spray

Recommended thinner
THINNER 21-06

Volume of thinner
0 - 10%, depending on required thickness and application conditions

Nozzle orifice
1.8 – 2.0 mm (approx. 0.070 – 0.079 in)

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

Note: A moisture and oil trap in the main air supply is essential

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Airless spray
- 28:1 pump or larger

Recommended thinner
THINNER 21-06

Volume of thinner
0 - 5%

Nozzle orifice
Approx. 0.43 – 0.53 mm (0.017 – 0.021 in)

Nozzle pressure
15.0 - 18.0 MPa (approx. 150 - 180 bar; 2176 - 2611 p.s.i.)

Brush/roller
- Only for touch-up and spot repair

Recommended thinner
THINNER 21-06

AMERCOAT® 90 S

Cleaning solvent
THINNER 90-58

Note: All application equipment must be cleaned immediately after use

ADDITIONAL DATA

Overcoating interval for DFT up to 150 µm (6.0 mils)				
Overcoating with...	**Interval**	**10°C (50°F)**	**20°C (68°F)**	**30°C (86°F)**
itself	Minimum	48 hours	24 hours	16 hours
	Maximum	15 days	12 days	10 days

Note: Surfaces must be clean, dry and free of contamination, immediately prior to recoating.

Curing time for DFT up to 150 µm (6.0 mils)		
Substrate temperature	**Dry to handle**	**Service- water immersion**
10°C (50°F)	32 hours	14 days
20°C (68°F)	16 hours	7 days
30°C (86°F)	10 hours	4 days

Notes:
- Adequate ventilation must be maintained during application and curing
- Drying times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions

Pot life (at application viscosity)	
Mixed product temperature	**Pot life**
20°C (68°F)	4 hours
30°C (86°F)	2 hours

Note: Since the pot life is limited and shortened by high temperatures, do not mix more material that will be used within the pot life period

SAFETY PRECAUTIONS

- Since improper use and handling can be hazardous to health and cause of fire or explosion, safety precautions included with Product Data/Application Instruction and Material Safety Data Sheet must be observed during all storage, handling, use and drying periods
- Adequate ventilation to remove solvent must be maintained during application and curing

AMERCOAT® 90 S

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 IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD	INFORMATION SHEET	1431
• SAFE WORKING IN CONFINED SPACES	INFORMATION SHEET	1433

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