

AMERCOAT® 242 HB

DESCRIPTION

Two-component, solvent free glass flake reinforced lining

PRINCIPAL CHARACTERISTICS

- Reinforced lining for crude oil and refined petroleum products
- Excellent chemical, solvent, and water immersion resistance
- Excellent abrasion resistance
- Excellent pit filling capabilities

COLOR AND GLOSS LEVEL

- Gray
- Gloss

Note: Epoxies will chalk and change color with exterior exposure. Colors are approximately and will tend to change over time.

BASIC DATA AT 68°F (20°C)

Data for mixed product	
Number of components	Two
Volume solids	98 ± 2%
VOC (Supplied)	max. 1.2 lb/US gal (approx. 144 g/l)
Recommended dry film thickness	15.0 - 60.0 mils (375 - 1500 µm) depending on system
Theoretical spreading rate	79 ft ² /US gal for 20.0 mils (2.0 m ² /l for 500 µm)
Shelf life	Base: at least 24 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

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Steel

- Remove weld spatter, protrusions, and laminations in steel. Grind welds smooth in accordance with NACE RP-0178
- Remove all surface contaminants, oil and grease in accordance with SSPC SP-1
- Abrasive blast with an angular abrasive to an SSPC SP-10 cleanliness or higher. Achieve a surface profile of 2.5 – 5.0 mils (64 – 125 µm)
- AMERCOAT 114 A may be used as a pit filler for severely pitted steel and surface discontinuities
- Check with PPG technical service for the maximum allowable soluble salt level for water immersion service. This will vary based on the water chemistry and service temperatures

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Concrete

- Remove all surface contaminants such as oil, grease, and embedded chemicals
- Abrade the surface per ASTM D4259 to remove all chalk and surface glaze or laitance
- Mechanical surface preparation should expose sub-surface voids and provide a surface profile equivalent to 60 grit sandpaper or coarser
- Test for moisture by conducting a plastic sheet test in accordance with ASTM D4263

Non-ferrous metals

- Lightly abrasive blast in accordance with SSPC SP-16 to achieve a uniform and dense 2.0 - 4.0 mil anchor profile

Stainless steel

- Abrasive blast with a hard angular abrasive to achieve a uniform and dense anchor profile of 2.0 – 4.0 mils (50 – 100 µm)

Substrate temperature and application conditions

- Surface temperature during application should be between 50°F (10°C) and 100°F (38°C)
- Surface temperature during application should be at least 5°F (3°C) above dew point
- Ambient temperature during application and curing should be between 50°F (10°C) and 100°F (38°C)
- Relative humidity during application should be between 0% and 80%

INSTRUCTIONS FOR USE

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

- Pre-mix pigmented components with a pneumatic air mixer at moderate speeds to homogenize the container. Add hardener to base and agitate with a power mixer for 1–2 minutes until completely dispersed

Induction time

Mixed product induction time	
Mixed product temperature	Induction time
50°F (10°C)	15 minutes
60°F (16°C)	10 minutes
Above 70°F (21°C)	None

Pot life

1 hour at 70°F (21°C)

Note: See ADDITIONAL DATA – Pot life



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Application

- Area should be sheltered from airborne particulates and pollutants
- Avoid combustion gases or other sources of carbon dioxide that may promote amine blush.
- Ensure good ventilation during application and curing
- For tank lining, dehumidification equipment is highly recommended
- Provide shelter to prevent wind from affecting spray patterns
- Bulletin #1489 for further information on prevention, detection, and removal of amine blush
- Refer to INFORMATION SHEET 1434 for more details on ventilation requirements for tank lining applications

Material temperature

Material temperature during application should be between 50°F (10°C) and 90°F (32°C)

Airless spray

- 64:1 pump or larger
- Use of in-line heaters and insulated lines may be required for proper atomization in cold weather and with long fluid lines.
Use ½" fluid lines for spray configurations requiring more than 100 feet from the pump

Recommended thinner

No thinner should be added

Nozzle orifice

0.021 – 0.025 in (approx. 0.53 – 0.64 mm)

Brush/roller

- Use a high quality natural bristle brush and/or solvent resistant, 1/4" or 3/8" nap roller. Ensure brush/roller is well loaded to avoid air entrainment. Multiple coats may be necessary to achieve adequate film-build
- Ensure the brush/roller is well-loaded to avoid air entrainment. Level air bubbles with a brush. Multiple coats may be necessary to achieve adequate film build
- Spray application is required for tank linings with the exception of stripe coating and application for small repair areas

Recommended thinner

No thinner should be added

Cleaning solvent

Amercoat 12 Cleaner (Thinner 90-58)

Note: All application equipment must be cleaned immediately after use

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ADDITIONAL DATA

Overcoating interval for DFT up to 60.0 mils (1524 µm)							
Overcoating with...	Interval	50°F (10°C)	60°F (16°C)	70°F (21°C)	80°F (27°C)	90°F (32°C)	100°F (38°C)
itself	Minimum	36 hours	28 hours	24 hours	14 hours	12 hours	8 hours
	Maximum	30 days	25 days	20 days	14 days	7 days	4 days

Notes:

- Dry times are dependent on air and surface temperatures as well as film thickness, ventilation, and relative humidity. Maximum recoating time is highly dependent upon actual surface temperatures – not simply air temperatures. Surface temperatures should be monitored, especially with sun-exposed or otherwise heated surfaces. Higher surface temperatures shorten the maximum recoat window
- Surface must be clean and dry. Any contamination must be identified and removed. Particular attention must be paid to surfaces exposed to sunlight where chalking may be present. In those situations, a further degree of cleaning may be required. PPG Technical Service can advise on suitable cleaning methods. If maximum recoat/topcoat time is exceeded, then roughen surface

Curing time for DFT up to 60.0 mils (1524 µm)		
Substrate temperature	Dry hard	Dry to service
50°F (10°C)	36 hours	14 days
60°F (16°C)	30 hours	10 days
70°F (21°C)	24 hours	6 days
90°F (32°C)	14 hours	3 days
95°F (35°C)	12 hours	60 hours
100°F (38°C)	10 hours	48 hours

Pot life (at application viscosity): AMERCOAT 68 A	
Mixed product temperature	Pot life
50°F (10°C)	1.5 hours
70°F (21°C)	1 hour
90°F (32°C)	30 minutes

Heat cure procedures

- Allow the final coat of the lining to achieve a dry hard condition prior to heating above 120°F (49°C)
- Do not heat cure until after holiday detection has been accomplished (when specified)
- Ramp heat at a rate of no greater than 2°F (-17°C) / minute to the target temperature
- Surface temperatures must be measured at various elevations from top to bottom and in each cardinal direction. The lowest surface temperature must meet the minimum time/temperature requirements of the heat cure schedule. Record all temperatures

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Temperature	Cure to service
110°F (43°C)	36 hours
120°F (49°C)	24 hours
130°F (54°C)	18 hours
140°F (60°C)	12 hours
150°F (66°C)	8 hours
160°F (71°C)	5 hours

Notes:

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SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets
- Adequate ventilation to remove solvent must be maintained during application and curing

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

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Packaging: Available in 5-gallon kits

Product code	Description
AT242HB-2	Gray
AT242HB-B	Hardener

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PPG Protective & Marine Coatings

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