

# AMERCOAT® 428 PCLO

## DESCRIPTION

Solvent Free Epoxy Lining

## PRINCIPAL CHARACTERISTICS

- High build, single coat protection
- High gloss
- Easy cleaning
- Low odor during application
- Non-flammable
- Meets VOC regulations
- Heated plural component application
- More flexible and abrasion resistant than conventional epoxy coatings
- Compliant with US FDA 21 CFR 175.300 for food grade cargoes

## COLOR AND GLOSS LEVEL

- Railcar blue
- Gloss

Note:

- Epoxy coatings will chalk and fade upon exposure to sunlight, elevated temperatures, or chemical exposure. Discoloration and normal chalking do not impact performance. Light colors will darken over time. Some batch-to-batch variation in color is to be expected. Color matches are approximate.

## BASIC DATA AT 20°C (68°F)

| Data for mixed product                |  |
|---------------------------------------|--|
| <b>Number of components</b>           | Two  |
| <b>Volume solids</b>                  | 100%   |
| <b>VOC (Supplied)</b>                 | max. 0.8 lb/US gal (approx. 99 g/l)  |
| <b>Recommended dry film thickness</b> | 8.0 - 16.0 mils (200 - 400 µm) depending on system   |
| <b>Theoretical spreading rate</b>     | 134 ft <sup>2</sup> /US gal for 12.0 mils (3.3 m <sup>2</sup> /l for 300 µm)                               |
| <b>Shelf life</b>                     | Base: at least 12 months when stored cool and dry<br>Hardener: at least 12 months when stored cool and dry |

Notes:

- The target dry film thickness for plastic pellet service is 8-10 mils.
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time



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## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Mild steel

- Remove all surface contaminants, oil and grease in accordance with SSPC SP-1
  - Abrasive blast clean to SSPC-SP10 (ISO8501-1 Sa 2.5). Blast with an angular abrasive to achieve an anchor profile of 2.0 – 4.0 mils (50 – 100 µm) as indicted by a Keane-Tator Surface profile Comparator or Testex Tape
  - Contact PPG for maximum allowable salt containment levels
  - Ensure surface is dust free after blasting
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### Repair

- Remove all rust, loose paint, grease or other contaminants preferably by spot abrasive blast from damaged areas abraded to bare steel. For smaller areas, abrade the steel in accordance with SSPC SP-11 standards to create a uniform and dense anchor profile
  - Taper abrade the perimeter of the repair area to a feathered edge extending 1 – 3 inches from the steel
  - Apply AMERCOAT 428 PCLO to the repair area at a minimum of 8.0 mils (200 µm), overlapping the previously feathered edge
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### Substrate temperature and application conditions

- Surface temperature during application should be between 40°F (4°C) and 120°F (49°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 40°F (4°C) and 120°F (49°C)
  - Relative humidity during application should be between 0% and 85%
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## SYSTEM SPECIFICATION

- To be applied in one coat at 8.0-16.0 mils.

Note:

- Maximum loading temperature is 120°F unless evaluated and approved by PPG technical service.
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## INSTRUCTIONS FOR USE

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

- Jiffy mixer, Ensure feed tanks and drums remain thoroughly mixed at low speed to ensure homogenization
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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 and ambering of light colors
  - Ensure good ventilation during application and curing
  - Provide shelter to prevent wind from affecting spray patterns
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## **Material temperature**

- Material temperature during application should be between 110°F (43°C) and 130°F (54°C)
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## **Pot life**

20 minutes at 70°F (21°C)

Note:

- See ADDITIONAL DATA – Pot life
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## **Airless spray: Plural component**

- 1 : 1 Heated Plural Component Spray
- 5:1 or 10:1 transfer pumps
- Hoses should normally be kept as short as possible
- Gel time at 120 F is approximately 5 minutes (maximum)
- Achieve 3,500–4,500 psi
- Use a 12" x 3/8" , 24 element static mixer
- Optimum temperature at the gun is 105 - 115 F

## **Recommended thinner**

No thinner should be added

## **Nozzle orifice**

0.017 – 0.019 in (approx. 0.43 – 0.48 mm)

## **Nozzle pressure**

3500 - 4500 p.s.i. (approx. 242 - 311 bar; 24.1 - 31.0 MPa)

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## **Brush/roller**

- Product may be applied via brush and roller by mixing small quantities and applying immediately. Touch up kits for Amercoat 428PCLO are available.
- If needed for touch up, collect a small quantity from the static mixer and apply to the repair area with a well loaded, natural bristle brush
- Be aware the gel time is typically less than 10-15 minutes

## **Recommended thinner**

Thin with up to 5% Amercoat 65 Thinner (Thinner 21-06)

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## **Cleaning solvent**

- THINNER 90-58 (AMERCOAT 12)
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## ADDITIONAL DATA

| Overcoating interval for DFT up to 16.0 mils (400 µm) |          |             |             |             |              |
|---|----------|-------------|-------------|-------------|--------------|
| Overcoating with...                                   | Interval | 50°F (10°C) | 70°F (21°C) | 90°F (32°C) | 120°F (49°C) |
| itself  | Minimum  | 12 hours    | 6 hours     | 4 hours     | 2 hours      |
|   | Maximum  | 3 days      | 48 hours    | 24 hours    | N/A          |

Notes:

- Roughen surface when maximum recoat or topcoating time is exceeded
- Prior to overcoating, solvent wipe surface with THINNER 21-06 (AMERCOAT 65) or THINNER 90-58 (AMERCOAT 12)

| Curing time for DFT up to 16.0 mils (400 µm) |              |               |
|--|--------------|---------------|
| Substrate temperature                        | Dry to touch | Dry to handle |
| 50°F (10°C)                                  | 6 hours      | 20 hours      |
| 70°F (21°C)                                  | 4 hours      | 12 hours      |
| 90°F (32°C)                                  | 3 hours      | 7 hours       |
| 120°F (49°C)                                 | 1 hour       | 4 hours       |

| Pot life (at application viscosity) |              |
|-------------------------------------|--------------|
| Mixed product temperature           | Pot life     |
| 50°F (10°C)                         | 35 minutes   |
| 70°F (21°C)                         | 20 minutes   |
| 90°F (32°C)                         | 12 minutes   |
| 110°F (43°C)                        | 8 minutes    |
| 130°F (54°C)                        | 3- 5 minutes |

## SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEET 1411 and relevant Material Safety Data Sheets

## 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

## WARRANTY

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## AVAILABILITY OF PACKAGING

### Packaging

- Available in 55 gallon drums (50 gallon fill), 10 gallon kits (2.5 gallon cans), 1 quart touch-up kits

Depending on specific country of application the following versions are available:

| Product   | Color             |
|-----------|-------------------|
| AT428L-B  | Hardener          |
| AT428-419 | Railcar Blue Base |

