AMERCOAT®

Protective Coatings

# Amerlock 880

## Polyamine added cured epoxy coating

## Product Data/ Application Instructions

- **Primarily designed for use in offshore splash zone maintenance**
- **Outstanding sea water resistance**
- **Excellent corrosion resistance**
- **Good abrasion resistance**
- **Continues to cure when immersed in water**
- **Long term protection in a single coat application**
- **Resistant to well designed cathodic protection**
- **Suitable on wet blast cleaned substrates (damp or dry )**
- **Surface tolerant**

Amerlock 880 is used as a high performance maintenance coating with excellent adhesion to a wide range of existing coatings. Amerlock 880 can be applied to mechanically cleaned surfaces. Amerlock 880 has excellent application characteristics. It can be applied by conventional and airless spray equipment, brush or roller.

### Typical Uses

Specially formulated as a high performance coating on steel in industrial facilities, bridges, tank exteriors, containers, oil tanks, piping, roofs and other areas subject to moisture, high humidity, marine weathering and other exposure.

### Physical Data

| | | | | |
|---|---|---|---|---|
| Finish | semi-gloss | | | |
| Colour | Yellow, black ( other colours on request ) | | | |
| Components | 2 | | | |
| Mixing ratio (volume) | 3 parts resin to 1 part cure | | | |
| Curing mechanism | solvent evaporation and chemical reaction between components | | | |
| Volume solids | 85% (ISO 3233)** | | | |
| VOC*** | | | | |
| EC SED 1999/13/EC | 207 g/l | | | |
| Dry film thickness | 300-500 microns<br>12-20 mils | | | |
| Number of coats | 1or 2 | | | |
| Theoretical coverage | $m^2$/L | | $ft^2$/gal | |
| at 300 microns / 12mil dft | 2.8 | | 110 | |
| Temperature resistance | Dry | | Wet | |
| | °C | °F | °C | °F |
| Continuous | 120 | 248 | 40 | 104 |
| Flashpoints | °C | | °F | |
| Amerlock 880 cure | 29 | | 84 | |
| Amerlock 880 resin | 24 | | 75 | |
| Thinner 91-92 | 22 | | 72 | |
| Thinner 90-53 | 25 | | 77 | |
| Thinners | Thinner 91-92 | | | |
| Cleaner | Thinner 90-53 | | | |

* Uniform appearance may require two coats of Amerlock 880 in a light colour on tanks and other large structures over contrasting primers or intermediate coats. Use only a light coloured primer or intermediate coat when one finish coat of Amerlock 880 in a light colour is specified.

** Volume solids is measured in accordance with ISO 3233. Slight variations ±3% may occur due to colour and testing variances.

*** VOC VOC figures are quoted according to both the EC directive 1999/13/EC which are theoretically calculated figures.

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## Surface Preparation

Coatings performance in general, is proportional to the degree of surface preparation. Abrasive blasting is usually the most effective and economical method. For circumstances where this is impossible or impractical, Amerlock 880 has been developed.

STEEL- Blast clean to Sa 2½ (ISO-8501-1) or SSPC-SP-10. Amerlock 880 can also be applied over mechanically cleaned surfaces. Remove all loose rust, dirt, oil and grease or other contaminants from the surface. Power tool clean in accordance with St 3 or SSPC-SP3 or hand tool clean in accordance with St 2 or SSPC-SP2, UHPWJ in accordance with WJ2L/3l (SSPC-VIS-4). Amerlock 880 can be applied over damp substrates.
For immersion in water abrasive blasting to SA 2 ½ is recommended.

EXISTING AGED COATINGS - Amerlock 880 may be used over most types of properly cleaned, tightly adhering aged 2 pack coatings. It is always recommended a test patch is applied to ensure long-term capability, as performance will depend on condition of the existing coating such as age, adhesion and film thickness

## Application Data

Substrate ..... steel, aged existing coatings.

Application method..... Airless or conventional spray, brush or roller.

Brush or roller application may require additional coats to achieve the specified dft.

Mixing ratio (volume)..... 3 parts resin to 1 part cure

Environmental conditions

| | | |
|---|---|---|
| Air temperature..... | 5-50 °C | 41-122 °F |
| Surface temperature..... | 5-50 °C | 41-122 °F |

*For optimum curing, surface temperature must be at least 3°C / 5°F above the dew point to prevent moisture condensation on the surface.*

| Potlife (°C/°F) | 40/104 | 32/90 | 21/70 | 10/50 |
|---|---|---|---|---|
| | 30 min | 1 hr | 2 hrs | 3 hrs |

| Drying times at 125µm (°C/°F) | 40/104 | 32/90 | 21/70 | 10/50 |
|---|---|---|---|---|
| Dry to touch ..... | 1 hr | 2 hr | 3 hrs | 5 hrs |
| Dry through..... | 3 hrs | 6 hrs | 12 hrs | 20 hrs |
| Fully cured ..... | 2 days | 4 days | 7 days | 21 days |

Recoat or topcoat times at 125 µm (°C/°F)

| | 40/104 | 32/90 | 21/70 | 10/50 |
|---|---|---|---|---|
| Minimum ..... | 4 hrs | 6 hrs | 10 hrs | 14 hrs |
| Maximum * ..... | 4 days | 7 days | 10 days | 14 days |

Surfaces to be overcoated must be clean and dry. Any contamination must be identified and adequately removed. Particular attention must be paid to surfaces that have been exposed to heat and/or sunlight and where chalking may be present. A degree of surface cleaning will be required. Your PPG representative can advise on suitable cleaning methods.

Drying times are dependent on temperature, ventilation and film thickness.

Thinner ..... Thinner 91-92

Equipment cleaner ..... Thinner 90-53

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### Application Equipment

The following equipment is listed as a partial guide and suitable equipment from other manufacturers may be used. Adjustments of pressure and change of tip size may be needed to achieve the proper spray characteristics.

AIRLESS SPRAY - Standard airless spray equipment, with a 0.48 mm (0.019 inch) fluid tip or larger.
CONVENTIONAL SPRAY - Industrial equipment , having separate air and fluid pressure regulators, mechanical pot agitator and a moisture and oil trap in the main air supply line are recommended.
BRUSH/ROLLER - Apply evenly, using a clean well-loaded brush or roller. Ensure the coating is not brushed or rollered-out too far. Application by brush or roller will provide approx. 80 microns dft. in a single coat application.
MIXER - Use power mixer powered by an air motor or an explosion proof electric motor.

### Application Procedure

Amerlock 880 is packaged in two components in the proper proportions which must be mixed together before use (20 litre unit):

1. Flush equipment with recommended cleaner before use.
2. Stir both resin component and cure component to an even consistency with a power mixer.
3. Add cure to resin, and continue stirring until homogeneous.
4. For conventional spray, thin only as needed for workability with no more than 10 vol % of recommended thinner. Thinning is normally not needed for airless spray.
5. Apply a wet coat in even parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays. Give special attention to corners, welds, rough areas, edges.
6. Check thickness of dry coating with a non destructive dry film thickness gauge such as Mikrotest or Elcometer. If less than specified thickness, apply additional material as needed.
7. Small damaged or bare areas and random pinholes or holidays can be touched up by brush.
8. Clean all equipment with recommended cleaner immediately after use or at least at the end of each working day or shift. When left in spray equipment, Amerlock 880 will cure and cause clogging.

### Shipping Data

Minimum shelf life

| | |
|---|---|
| Resin and cure ..... | 1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C (41 to 104°F) |

**Safety**
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.

**Warranty**
PPG warrants its products to be free from defects in material and workmanship. PPG's sole obligations and Buyer's exclusive remedy in connection with the products shall be limited, at PPG's option, to either replacement of products not conforming this warranty or credit to Buyer's account in the invoiced amount of the non-conforming products. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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To avoid any confusion that may arise through translation into other languages, the English version of the Product Data/Application Instructions will be the governing literature and must be referred to in case of deviations with product literature in other languages.

**Condition of Sale**
All our transactions are subject to our Terms and Conditions of Sale.