

SSPC-16 (C-200A)

Coal-tar epoxy

Product Data/ Application Instructions

- Meets requirements U.S. Corp. of Engineers C-200A and Steel Structure Painting Council SSPC-Paint 16
- Suitable for immersion service
- High-build, 16 mils in only one coat

Typical Uses

Protective coating and lining for ship and barge hulls, penstocks, fresh water, seawater, alkali, salt solution and sour crude tanks.

Surface Preparation

Surface must be clean, dry and free of oil, grease, dirt or other contamination.

Steel – Welds should be continuous with no skip-welds on overlapping steel surfaces.

Nonimmersion – New steel without pits or depression: abrasive blast, SSPC-SP 6. Previously painted or pitted steel: abrasive blast, SSPC-SP 10.

Immersion – Blast all steel SSPC-SP 10, as a minimum. Blast to a 2 - 4 mil (50 - 100 microns) profile as determined with a Keane-Tator Surface Profile Comparator or a similar device. Remove abrasive residue or dust from surface.

Concrete – Light abrasive blast to remove all previous coatings, chalk, and surface glaze or laitance. If blasting is not possible, acid etch uncoated concrete to obtain a glaze-free surface with a slightly granular texture. Rinse with clean water and allow to dry thoroughly. After blasting or acid etching, fill all small holes or voids with material such as Amercoat® 114A filler compound.

Application Instructions

Adhere to all application instructions, precautions, conditions, and limitations to obtain the maximum performance. For conditions outside the requirements or limitations described, contact your PPG PMC representative.

Application Equipment

Airless spray – Such as Graco Bulldog Hydra-Spray or larger; 0.018- to 0.027-inch fluid tip.

Conventional spray – Such as DeVilbiss MBC or JGA or Binks 18 or 62 spray gun with a pressure pot and mechanical agitator. A moisture and oil trap in the main air supply line is essential. Separate air and fluid pressure regulators are recommended.

Power mixer – Jiff Mixer with an air or explosion-proof electric motor.

Physical Data

| | | |
|-----------------------------|--|-------------------|
| Finish | Flat | |
| Color | Black | |
| Components | 2 | |
| Curing mechanism | Solvent release and chemical reaction between components | |
| Volume solids (calculated) | 75% ± 3% | |
| Dry film thickness per coat | 8 mils (200 microns) | |
| Coats | 2 | |
| Theoretical coverage | ft ² /gal | m ² /L |
| 1 mil (25 microns) | 1203 | 29.5 |
| 8 mils (200 microns) | 150 | 3.7 |
| VOC (Calculated) | lb/gal | g/l |
| Mixed | 1.83 | 220 |
| Mixed/Thinned | 2.43 | 292 |
| Flash point (SETA) | °F | °C |
| Component A | 82 | 28 |
| Component B | 200 | 93 |
| Amercoat 65 | 78 | 25 |
| Amercoat 12 | 2 | -17 |

Application Data

| | | | |
|-----------------------------------|---|----------|-------|
| Applied over | Prepared steel, concrete | | |
| Surface preparation | SSPC-SP 10 or SP 6 | | |
| steel | ASTM D4259 or D4260 | | |
| concrete | Airless or conventional spray | | |
| Method | 4 parts Component A to 1 part Component B | | |
| Mixing ratio (by volume) | 4 hours | | |
| Pot life @ 70°F (21°C) | Environmental conditions | | |
| Temperature | °F | °C | |
| air and surface | 50 to 120 | 10 to 49 | |
| Drying time for recoat and curing | °F/°C | | |
| Recoat (hours) | 90/32 | 70/21 | 50/10 |
| minimum | 4 | 8 | 24 |
| maximum | 12 | 24 | 72 |
| curing (days) | 4 | 7 | 10 |

Curing process is dependent upon time, temperature and proper ventilation.

| | |
|-------------------|------------------------|
| Thinner | Amercoat 65 |
| Equipment cleaner | Thinner or Amercoat 12 |

Application Procedure

1. Flush all equipment with thinner or Amercoat 12.
2. Stir Component A (pigmented) until uniformly blended.
3. Add Component B (clear) and continue mixing for 5 minutes.
Note: High temperatures limit and shorten pot life. Do not mix more material than will be used in 4 hours at 65 to 80°F (18 to 27°C).
4. Thinning is normally not required when using airless spray equipment.
5. For conventional spray, thin only for workability, such as to prevent dry spray during hot weather; no more than 1 pint Amercoat 65 per gallon of mixed material. Do not thin for airless.
6. Stir during application to maintain uniformity.
7. Apply even wet coat overlapping each parallel pass 50 percent. Immediately cross-spray to obtain a continuous film. Drying time of first coat should be held to a minimum for application of second coat.
8. Double-coat all weld, corners, sharp edges, rivets and bolts, rough spots, etc.
9. Wet film thickness of 12 mils (300 microns) normally provides 8 mils (125 microns) dry film.
10. Check thickness of dry but uncured coating with a nondestructive gauge such as Mikrotest or Elcometer.
11. For pinhole-free coating, check continuity of dry but uncured coatings with a nondestructive holiday detector such as Tinker and Rasor Model M•1.
12. If additional material is needed or two coatings specified, apply second coat as soon as first coat is firm. Material cured beyond recoat maximum requires sweep blast before applying a second coat.
13. Application of material in tanks, pipes and other confined spaces requires ventilation during application and curing.
14. Clean all equipment with thinner or Amercoat 12 immediately after use.

Curing Time

Curing process is dependent upon time, temperature, and proper ventilation. For most exterior atmospheric exposures, the coating can be placed in service as soon as it has dried sufficiently to withstand handling. Immersion where early abrasion resistance is not required minimum curing time is 72 hours at 65 to 75°F (18 to 24°C). Where maximum chemical or abrasion resistance is required the coating must be fully cured.

Recoat and Repair Schedule

Apply additional SSPC-SP16 within the specified drying times to ensure proper adhesion. Allow no more than six hours of total sunlight exposure before recoating. Protect against rain, moisture or condensation. Otherwise, intercoat adhesion may be impaired. If the maximum recoat time has been exceeded, roughen surface by brush blasting before coating.

Where maximum chemical or abrasion resistance is required, the coating must be fully cured according to the schedule.

Shipping Data

| | | |
|--------------------------|--------------------|------|
| Packaging | 5-gal units | |
| Component A | 4-gal in 5-gal can | |
| Component B | 1-gal in 1-gal can | |
| Shipping weight (approx) | lb | kg |
| 5-gal unit | | |
| Component A | 49.7 | 22.5 |
| Component B | 11 | 5.0 |

Shelf life when stored indoors at 40 to 100°F (4 to 38°C)
6 months from shipment date

Numerical values are subject to normal manufacturing tolerances, colors and testing variances. Allow for application losses and surface irregularities.

This product is photochemically reactive as defined by the South Coast Air Quality Management District's Rule 102 or equivalent regulations.

Safety Precautions

Read each component's material safety data sheet before use. Mixed material has hazards of both components. Safety precautions must be strictly followed during storage, handling, and use.

Component A – Flammable. Danger! Contains coal tar, polyamide resin, xylene. Vapor and/or spray mist can be harmful. Irritating to skin, mucous membranes, eyes and respiratory system. Overexposure can cause headache, nausea, dizziness or asphyxiation and/or lung injury. Can be harmful if swallowed, inhaled or absorbed through the skin. Lung, kidney and liver damage can occur. Can cause skin and respiratory sensitization and allergic reaction or asthma. Skin irritation accentuated by sunlight. Severe eye and skin burns and/or injury. Prolonged and repeated skin exposure to coal tar over many years can result in skin cancer. Overexposure to coal tar pitch vapors can increase risk of developing lung cancer.

Component B – Combustible. Warning! Contains epoxy resin. Vapor and/or spray mist can be harmful. Irritating to skin, mucous membranes, eyes and respiratory system. Overexposure can cause headache, nausea, dizziness or asphyxiation and/or lung injury. Can be harmful if swallowed. Can cause skin and respiratory sensitization and allergic reaction or asthma. Preexisting allergies may be aggravated.

Hygienic practices – Wash thoroughly after use and before eating, smoking or using washroom. Use protective barrier cream on exposed skin. Launder contaminated clothing before use. Destroy contaminated shoes or leather material. Contact lenses should not be worn when using this material.

First-aid – For overexposure to vapor – provide fresh air. If breathing is labored, give oxygen or artificial respiration. For skin contact, wash thoroughly with soap and water. For eyes, flush immediately with plenty of water for at least 15 minutes and get medical attention. If swallowed, drink 1 or 2 glasses of water to dilute. Do not induce vomiting. Consult physician or poison control center immediately. Treat symptomatically.

Hazards – Avoid heat, sparks, arc and open flame; breathing vapor, dust, spray mist or contact with eyes and skin. Use adequate ventilation during mixing, application and drying. Reports associate repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Wear protective equipment such as goggles, face protection, gloves, full protective clothing and properly fitted, NIOSH certified respirator during mixing, spraying and until all vapors and mists are gone. In confined, poorly ventilated areas use airline, hood-type respirator and explosion- and spark-proof equipment. Welding and cutting can produce hazardous fumes and gases; follow the current American National Standard Z49.1, "Safety in Welding and Cutting."

Fire – Blanket flames with dry chemical, carbon dioxide or foam. Wear self-contained, breathing apparatus. Closed containers may explode when exposed to extreme heat. Toxic fumes may be formed under fire conditions.

Spillage – Eliminate all sources of ignition or sparks. Use absorbent cleanup materials. Place in separate, closed, metal container.

Storage and disposal – Store in cool, dry, well-ventilated area; indoors at 40-100°F. Keep container closed and upright to prevent leakage. Dispose of in separate, closed, metal container in accordance with applicable regulations.

CAUTION – Improper use and handling of this product can be hazardous to health and cause fire or explosion.

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: implementation of proper ventilation, use of proper lamps, wearing of proper protective clothing and masks, tenting and proper separation of application areas. Consult your supervisor. Proper ventilation and protective measures must be provided during application and drying to keep solvent vapor concentrations within safe limits and to protect against toxic hazards. Necessary safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces, such as tank interiors and buildings.

This product is to be used by those knowledgeable about proper application methods. PPG makes no recommendation about the types of safety measures that may need to be adopted because these depend on application and space, of which PPG is unaware and over which it has no control.

If you do not fully understand the warnings and instructions or if you cannot strictly comply with them, do not use the product.

Note: Consult Code of Federal Regulations Title 29, Labor, parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable federal, state and local regulations on safe practices in coating operations.

This product is for industrial use only. Not for residential use in California.



**PPG Protective &
Marine Coatings**
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