

PPG DTM EPOXY 202

DESCRIPTION

High solids, direct to metal epoxy designed for rail, and a variety of transportation and infrastructure applications.

PRINCIPAL CHARACTERISTICS

- Fast dry times for rapid topcoating
- Low VOC, low HAPs
- Excellent corrosion protection properties

COLOR AND GLOSS LEVEL

- Gloss (70 - 80 gloss w/ 60° meter)

Note: Epoxy coatings will typically chalk and fade when used in exterior applications. PPG DTM Epoxy 202 is specifically designed to maintain its dark black appearance when exposed to exterior weathering.

BASIC DATA AT 68°F (20°C)

Data for mixed product	
Number of components	Two
Volume solids	75 ± 3%
VOC (Supplied)	EPA Method 24: 1.7 lb/US gal (200.0 g/l)
Temperature resistance (Continuous)	To 200°F (93°C)
Temperature resistance (Intermittent)	To 350°F (177°C)
Recommended dry film thickness	4.0 - 8.0 mils (100 - 200 µm) depending on system
Theoretical spreading rate	240 ft ² /US gal for 5.0 mils (5.7 m ² /l for 125 µm)
Shelf life	Base: at least 36 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
- Intermittent temperature resistance should be less than 5% of the time, and maximum 24 hours

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Coating performance is, in general, proportional to the degree of surface preparation



PPG DTM EPOXY 202

Steel

- Remove all surface contaminants, oil and grease in accordance with SSPC SP-1
- Abrasive blast with an angular abrasive to an SSPC SP-6 cleanliness or higher. Achieve a surface profile of 1.5 – 4.0 mils (38 – 100 µm)
- SSPC SP WJ-2(L) is also acceptable over a previous blasted surface
- For maintenance and repair in atmospheric service, the product can be applied over surfaces prepared in accordance with SSPC SP-2 or SSPC SP-3 (hand and power tool cleaning).

Non-ferrous metals and stainless steel

- Abrasive blast in accordance with SSPC SP-16 guidelines to achieve a uniform and dense 1.5-4.0 mil anchor profile. Size and hardness of abrasive should be adjusted as necessary based on the hardness of the substrate

Aged coatings and repairs

- Ensure the coating system is sound and well adhered
- Do not apply over thermoplastic coatings or coatings that exhibit poor solvent resistance
- A test patch is recommended to determine compatibility and adhesion
- Sweep blast or otherwise thoroughly abrade the existing coating in accordance with SSPC SP-7
- Alternately, PREP 88 may be used to prepare some existing coatings. Please refer to PREP 88 data sheet for details
- Feather the edges of tightly adhered, in-tact coatings at the perimeter of repair areas
- Power tool clean the existing steel in accordance with SSPC SP-3 (atmospheric service) or SSPC SP-11 (immersion service)

Substrate temperature and application conditions

- Surface temperature during application should be between 50°F (10°C) and 122°F (50°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 122°F (50°C)
- Relative humidity during application should be above 0% and below 90%

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 50:50 (1:1)

- Pre-mix base component 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

Mixed product induction time	
Mixed product temperature	Induction time
50°F (10°C)	20 minutes
70°F (21°C)	15 minutes
Above 75°F (24°C)	None



PPG DTM EPOXY 202

Pot life

6 hours at 70°F (21°C)

Note: See ADDITIONAL DATA – Pot life

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

Material temperature

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

Air spray

- Use standard conventional equipment

Recommended thinner

THINNER 21-06 (AMERCOAT 65), THINNER 91-82 (AMERCOAT T-10), or THINNER 21-25 (AMERCOAT 101) (recommended for > 90°F (32°C))

Volume of thinner

0 - 20%

Nozzle orifice

Approx. 0.070 in (1.8 mm)

Airless spray

- 30:1 pump or larger
- Can be applied with plural component equipment

Recommended thinner

THINNER 21-06 (AMERCOAT 65), THINNER 91-82 (AMERCOAT T-10), or THINNER 21-25 (AMERCOAT 101) (recommended for > 90°F (32°C))

Volume of thinner

0 - 10%

Nozzle orifice

0.017 - 0.021 in (approx. 0.43 - 0.53 mm)



PPG DTM EPOXY 202

Brush/roller

- Use a high quality natural bristle brush and/or solvent resistant, 3/8" nap roller. Ensure brush/roller is well loaded to avoid air entrainment. Multiple coats may be necessary to achieve adequate film-build

Recommended thinner

Thinner 21-06 (Amercoat 65), Thinner 91-82 (T-10), or Thinner 21-25 (Amercoat 101 - for hot surfaces)

Volume of thinner

0 - 10%

Cleaning solvent

Amercoat 12 Cleaner (Thinner 90-58) or Amercoat 65 Thinner (Thinner 21-06)

ADDITIONAL DATA

Overcoating interval for DFT up to 8.0 mils (200 µm)					
Overcoating with...	Interval	32°F (0°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)
itself	Minimum	N/A	5 hours	3 hours	2 hours
	Maximum	N/A	2 months	30 days	14 days

Notes:

- Surface must be clean and dry. Any contamination must be identified and removed. A detergent wash with PREP 88 or equivalent is required prior to application of topcoats after 30 days of exposure. However, 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.
- 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

Curing time for DFT up to 8.0 mils (200 µm)		
Substrate temperature	Dry to touch	Dry to handle
50°F (10°C)	5 hours	10 hours
70°F (21°C)	3 hours	6 hours
90°F (32°C)	2 hours	4 hours

Pot life (at application viscosity)	
Mixed product temperature	Pot life
50°F (10°C)	8 hours
70°F (21°C)	6 hours
90°F (32°C)	4 hours



PPG DTM EPOXY 202

SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets
- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes

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

WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. 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 of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at www.ppgmc.com. The English text of this sheet shall prevail over any translation thereof.

Packaging: Available in 5-gallon kits and 55-gallon drums; (5-gallon kits have 2.5 gallons of base and 2.5 gallons of hardener, 55-gallon drums have 50 gallon fills)

Product code	Description
E202-9	Black Base
E202-B	Hardener

The PPG logo, and all other PPG marks are property of the PPG group of companies. All other third-party marks are property of their respective owners.

