DURETHANE™ MCZ

DESCRIPTION

Two-component, moisture curing urethane zinc primer

PRINCIPAL CHARACTERISTICS

- >80% zinc in dry film
- VOC Compliant <2.8 lb/ gal
- Provides outstanding corrosion resistance

COLOR AND GLOSS LEVEL

- Green, red
- Flat

BASIC DATA AT 68°F (20°C)

Data for mixed product	
Number of components	Two
Volume solids	62 ± 2%
VOC (Supplied)	max. 2.8 lb/US gal (approx. 336 g/l)
Recommended dry film thickness	2.0 - 4.0 mils (50 - 100 µm) depending on system
Theoretical spreading rate	497 ft^2/US gal for 2.0 mils (12.4 m^2/l for 50 µm)
Shelf life	Base: at least 12 months when stored cool and dry Powder: 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

- Coating performance is proportional to the degree of surface preparation. All previous coats must dry and free of contaminants

Steel

- Abrasive blast with an angular abrasive to an SSPC SP-6 or higher. Achieve a surface profile of 1.0 – 3.0 mils (25 – 75 µm)
- Higher surface profiles up to 4.0 mils (100 µm) are accepatble, but the product must be applied in a thickness great enough to achieve a minimum of 2.5 mils (64 µm) dry film tickness (above the peaks of the profile)
- Apply this product as soon as possible to prevent blasted surface from rusting.
- Keep moisture, oil, grease, or other organic matter off surface before coating
- For touch up and repair, power tool cleaning in accordance with SSPC SP-11 is acceptable

DURETHANE™ MCZ

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 100°F (38°C)
- Relative humidity during application should be above 40% and below 90%

Warning

Removal of old paint by sanding, scraping or other means may generate dust or fumes which contain lead. EXPOSURE TO LEAD DUST OR FUMES MAY CAUSE ADVERSE HEALTH EFFECTS, ESPECIALLY IN CHILDREN OR PREGNANT WOMEN. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted and approved (e.g., NIOSHapproved) respirator and proper containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at 1-800-424-LEAD or the regional Health Canada office

SYSTEM SPECIFICATION

- Primers: Direct to metal, can be used to touch up inorganic zincs such as DIMETCOTE 9-SERIES
- PITTHANE Ultra, PITTGUARD Epoxies, DURETHANE DTM, AMERSHIELD, PSX 700, AMERCOAT 450H, AMERLOCK 2/400, AMERCOAT 385, AMERCOAT 370, PSX One

INSTRUCTIONS FOR USE

- Only mix full kits
- Pre-mix base component with a pneumatic air mixer at moderate speeds to homogenize the container. Add powder component slowly under agitation until fully mixed. Strain the mixture from one container to another through a 30 mesh filter/strainer to remove any undispersed lumps.
- Maintain agitation as needed throughout application to prevent settling of the zinc

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
- 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)

DURETHANE™ MCZ

Air spray

- Use standard conventional equipment
- Separate air and fluid pressure regulators and a moisture and oil trap in the main air supply line are recommended.

Recommended thinner
PPG THINNER 21-06 (AMERCOAT 65), PPG THINNER 21-25 (AMERCOAT 101) (recommended for >90°F)

Volume of thinner
0 - 10%

Nozzle orifice
Approx. 0.070 in (1.8 mm)

Airless spray

- 45:1 pump or larger

Recommended thinner
PPG THINNER 21-06 (AMERCOAT 65), PPG THINNER 21-25 (AMERCOAT 101) (recommended for >90°F)

Volume of thinner
0 - 5%

Nozzle orifice
0.017 in (approx. 0.43 mm)

Brush/roller

- Use a high quality natural bristle brush. Ensure brush is well loaded to avoid air entrainment. Brush application is limited to small touch up areas of a few square inches
- Roller application is not recommended

Recommended thinner
PPG THINNER 21-06 (AMERCOAT 65), PPG THINNER 21-25 (AMERCOAT 101) (recommended for >90°F)

Volume of thinner
0 – 5%

Cleaning solvent
PPG THINNER 90-58 (AMERCOAT 12 CLEANER) or PPG THINNER 21-06 (AMERCOAT 65)

DURETHANE™ MCZ

ADDITIONAL DATA

Overcoating interval for DFT up to 3.0 mils (75 µm)					
Overcoating with...	**Interval**	**40°F (4°C)**	**50°F (10°C)**	**70°F (21°C)**	**90°F (32°C)**
various epoxy coatings, polyurethane coatings, and PSX	Minimum Maximum	36 hours 6 months	12 hours 6 months	6 hours 6 months	4 hours 6 months

Note: Overcoating times valid for a relative humidity of 50%

Curing time for DFT up to 3.0 mils (75 µm)		
Substrate temperature	**Dry to touch**	**Dry to handle**
40°F (4°C)	9 hours	24 hours
50°F (10°C)	3 hours	8 hours
70°F (21°C)	1.5 hours	4 hours
90°F (32°C)	45 minutes	2.5 hours

Note: Curing times valid for a relative humidity of 50%

Pot life (at application viscosity)	
Mixed product temperature	**Pot life**
50°F (10°C)	12 hours
70°F (21°C)	6 hours
90°F (32°C)	3 hours

Product Qualifications

- SSPC Paint 20, Type II, Level 2
- RCSC Class B slip coefficient for high strenght bolted connections
- Zinc dust meets ASTM D520 type 2 standards

DISCLAIMER

- For industrial or professional use only

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

DURETHANE™ MCZ

Danger

Rags, steel wool or waste soaked with this product may spontaneously catch fire if improperly discarded. Immediately after use, place rags, steel wool or waste in a sealed water-filled metal container. Refer to www.pittsburghpaints.com, Spontaneous Combustion Advisory for additional information

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.ppgpmc.com. The English text of this sheet shall prevail over any translation thereof.

AVAILABILITY

Packaging

5-gallon kits

Do not mix components of different kit sizes.

DURETHANE™ MCZ

Product codes	Description
97-699GR	Green Base component
97-699RD	Red Base component
97-699P	Zinc Powder component