

PPG NOVAGUARD® 7300

formerly known as Milamar 7300AR

DESCRIPTION

Two-component, high-performance, ceramic-filled, novolac epoxy, quick patch paste

PRINCIPAL CHARACTERISTICS

- Easy application
- Rapid cure and return-to-service
- Excellent chemical resistance with good abrasion and impact resistance
- Ceramic-reinforced coating
- TYPICAL USES:
 - Steel tank repair
 - Resurface pitted metal
 - Repair cracks and holes in tanks and pipes
 - Designed for making permanent bonds, quick repairs and rebuilding metal components

COLOR AND GLOSS LEVEL

- Dark gray
- Semi-gloss

BASIC DATA AT 75°F (24°C)

Data for mixed product	
Number of components	Two
Mass density	13.3 lb/US gal (1.6 kg/l)
Volume solids	100 ± 2%
VOC (Supplied)	EPA Method 24: 0.0 lb/US gal (0.8 g/l)
Recommended dry film thickness	1/8" (3175 µm)
Theoretical spreading rate	13 ft ² /US gal for 125.0 mils (0.3 m ² /l for 3125 µm)
Dry to touch	4 hours
Dry to handle	12 hours
Overcoating Interval	Minimum: 30 minutes Maximum: 2 hours
Curing time	12 hours
Full cure after	5 days
Shelf life	Part A: at least 12 months when stored cool and dry Part B: at least 12 months when stored cool and dry

Notes:

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- Curing time reflects ready for service time
- Full cure after reflects maximum chemical resistance at 75°F (24°C)
- Material should be stored in dry conditions, out of direct sunlight, and in unopened original factory containers
- See ADDITIONAL DATA – Curing time
- Contact PPG Technical Services to determine whether this product will meet your chemical resistance requirements.

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Surface must be clean, dry, and sound
- Relative humidity during application and curing should not exceed 90%
- Substrate temperature during application should be between 50°F (10°C) and 140°F (60°C)

Steel (non-immersion service)

- Abrasive blast with an angular abrasive to an SSPC SP-6 or higher. Achieve a surface profile of 1.5 – 3.0 mils (38 – 75 µm)
- For mild environments, preparation in accordance with SSPC SP-2 or SSPC SP-3 is suitable

Steel (immersion service)

- Abrasive blast with an angular abrasive to an SSPC SP-10 cleanliness or higher. Achieve a surface profile of 2.5 – 3.5 mils (65 – 90 µm)

Weld repair

- Use a flame to sweat-out oil from deeply impregnated surfaces. Degrease using clean rags
- Stabilize cracks by drilling the extremities. Long cracks should be drilled, tapped and bolted every few inches. “Vee-out” all cracks using a file

SYSTEM SPECIFICATION

Chemical Resistances

- 10% Acetic Acid
- Ammonium Hydroxide
- IPA (Isopropyl Alcohol)
- 80% sulfuric acid

Note:

- A more complete list of chemical resistances is available by request from PPG PMC Technical Services

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INSTRUCTIONS FOR USE

Mixing ratio by volume: Part A to Part B 3:1

- Transfer the entire contents of both the Part A and Part B containers into a rolling tray, large aluminum pan, or plastic mixing board. Plan to keep the depth of the coating in the tray below 3/8" (1 cm)
- Combine Part A and Part B and thoroughly mix the two components of the kit together
- Properly mixed material will be a uniform color without light or dark spots
- Only mix full kits
- No thinner should be added
- Apply immediately after mixing

Application

- Apply directly using a spatula
- Press down firmly and swipe in multiple directions to remove entrapped air, to fill all cracks, and to ensure maximum contact with the surface
- Use reinforcement tape over holes and cracks
- A brush or roller can be used to smooth uncured surface with solvent
- To create satisfactory bond, apply the coating to adjacent sections within the re-coat window. If outside of the recoat window, allow product to cure, then abrade and clean before installing new product in adjacent areas

Cleaning procedure

- Clean mixer and all tools immediately after use to prevent material from bonding to surfaces
- Clean tools and equipment with acetone or other solvent based cleaners

ADDITIONAL DATA

Service Temperature

- Dry service: 490°F (255°C)
- Spill/Splash: 293°F (145°C)
- Immersion Service: 194°F (90°C)

Physical data of cured material	
Characteristic	Value
Bond strength (ASTM D4541)	2850 psi (19.7 mPa)
Coefficient of Thermal Expansion (ASTM C531)	1.1
Flash point	> 250°F (121°C)

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Curing Time			
Substrate temperature	Dry to handle	Service- water immersion	Minimum cure time for all other chemicals
75°F (24°C)	12 hours	48 hours	5 days

Pot life (at application viscosity)	
Mixed product temperature	Pot life
40°F (4°C)	80 minutes
75°F (24°C)	50 minutes
92°F (33°C)	30 minutes

Product Qualifications

- AWWA C210-98

DISCLAIMER

- For industrial or professional use only
- This product is specifically suitable for use on the substrates mentioned in this document. For application on any other substrates, please always contact your PPG representative for specific instructions and in order to make sure that the product performance can be safeguarded.

SAFETY PRECAUTIONS

- Read all label and Safety Data Sheet (SDS) information prior to use

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.

REFERENCES

- Information sheet | Explanation of product data sheets

WARRANTY

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AVAILABILITY OF PACKAGING

Packaging

- 1-gallon and 1-quart kits