

PPG NOVAGUARD™ 895

DESCRIPTION

Two-component, solvent-free, novolac phenolic epoxy coating for process tanks

PRINCIPAL CHARACTERISTICS

- Ceramic-reinforced coating for process tanks and above ground storage tanks
- Excellent resistance to dry and wet crude oil up to 360°F (180°C)
- Pass Atlas Cell (Crude Oil - Water) testing at 150°F (65°C)
- Can be applied by heavy-duty, single-feed, airless spray equipment (70:1)
- Compliant with API 652 standard

COLOR AND GLOSS LEVEL

- Cream, green and gray
- Gloss

Note:

- The gray color contains glass flake in its formulation (only available in Latin America)

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	12.2 lb/US gal (1.5 kg/l)
Volume solids	97 ± 2%
VOC (Supplied)	EPA Method 24: 4.0 g/ltr (0.0 lb/USgal)
Recommended dry film thickness	20.0 - 30.0 mils (508 - 762 µm) per coat
Theoretical spreading rate	53 ft²/US gal for 30.0 mils (1.3 m²/l for 762 µm)
Dry to touch	5 hours
Dry to handle	10 hours
Overcoating Interval	Minimum: 6 hours Maximum: 28 days
Full cure after	5 days
Shelf life	Base: at least 24 months when stored cool and dry Hardener: at least 24 months when stored cool and dry

Notes:

- See ADDITIONAL DATA – Spreading rate and film thickness
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time

PPG NOVAGUARD™ 895

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Steel; blast cleaned to a minimum of SSPC-SP10 or ISO-Sa2½, blasting profile 75 – 125 µm (3.0 – 5.0 mils)
-

Substrate temperature and application conditions

- Substrate temperature during application and curing should be between 10°C (50°F) and 40°C (104°F)
 - Substrate temperature during application and curing should be at least 5°F (3°C) above dew point
 - Relative humidity during application and curing should not exceed 85%
-

SYSTEM SPECIFICATION

- NOVAGUARD 895: 1 coat of 20 – 30 mils (500 – 750 µm)

Note:

- NOVAGUARD 895 may be applied at higher dry film thickness up to 50 mils (1250 microns) in 1 coat with proper application measures and conditions. Please contact your PPG representative for more details
-

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 6:1

- The temperature of the mixed base and hardener should preferably be above 68°F (20°C)
 - At lower temperature, the viscosity will be too high for spray application
 - No thinner should be added
-

Induction time

0 minute

Note:

- No induction time required
-

Pot life

2 hours at 20°C (68°F)

PPG NOVAGUARD™ 895

Airless spray

- Use heavy-duty, single-feed, airless spray equipment, preferably 70:1 pump ratio and suitable high-pressure hoses
- Length of hoses should be as short as possible
- All application equipment must be cleaned immediately after use. Paint inside the spraying equipment must be removed before the pot life has been expired.

Recommended thinner

No thinner should be added

Nozzle orifice

Approx. 0.021 in (0.53 mm)

Nozzle pressure

At 20°C (68°F) paint temperature min. 28.0 MPa (approx. 280 bar; 4061 p.s.i.). At 30°C (86°F) min. 22.0 MPa (approx. 220 bar; 3191 p.s.i.)

Brush/roller

- Brush: for stripe coating and spot repair only

Recommended thinner

No thinner should be added

Cleaning solvent

- THINNER 90-83 (preferred) or THINNER 90-53
-

ADDITIONAL DATA

Measuring wet film thickness

- A difference is often obtained between the measured apparent WFT and the real applied WFT. This is due to the thixotropy and the surface tension of the paint, which retards the release of air, trapped in the paint film for some time.

Measuring dry film thickness

- The DFT should be measured using a calibration foil of known thickness placed in between the coating and the measuring device
-

PPG NOVAGUARD™ 895

Spreading rate and film thickness

DFT	Theoretical spreading rate
20.0 mils (500 µm)	79 ft ² /US gal (1.9 m ² /l)
30.0 mils (750 µm)	53 ft ² /US gal (1.3 m ² /l)

Overcoating interval for DFT up to 30.0 mils (750 µm)

Overcoating with...	Interval	50°F (10°C)	68°F (20°C)	86°F (30°C)	104°F (40°C)
itself	Minimum	24 hours	6 hours	4 hours	3 hours
	Maximum	28 days	28 days	28 days	21 days

Note:

- Surface should be dry and free from any contamination

Curing time for DFT up to 30.0 mils (750 µm)

Substrate temperature	Dry to handle	Minimum cure time for purely aliphatic petroleum product (see note)	Minimum cure time for all other chemicals
50°F (10°C)	16 hours	3 days	7 days
68°F (20°C)	10 hours	16 hours	5 days
104°F (40°C)	3 hours	8 hours	48 hours

Notes:

- At the cure time for purely aliphatic petroleum products, crude oil, clean petroleum products/fuels and bio-diesel can be loaded. Gasoline/alcohol blends are not included in purely aliphatic petroleum products. Please contact your PPG representative for further details.
- Adequate ventilation must be maintained during application and curing

Pot life (at application viscosity)

Mixed product temperature	Pot life
68°F (20°C)	2 hours
86°F (30°C)	45 minutes
104°F (40°C)	25 minutes

PPG NOVAGUARD™ 895

SAFETY PRECAUTIONS

- Ventilation should be provided in confined spaces to maintain good visibility
- If workers are exposed to concentrations above the exposure limit, they must use appropriate personal protective equipment (PPE).
- 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 & 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

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.