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 and green
- Gloss

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 ft^2/US gal for 30.0 mils (1.3 m^2/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

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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)

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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

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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

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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

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