

Marine Paint Manual

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NOA PC 700

A two-pack phenol / novolac epoxy designed for cargo oil tanks loaded with petroleum and chemical products. It offers superior resistance to petroleum products, solvents, water and chemical attack. It protects inner cargo oil tanks from corrosion and prevent cargoes from contaminants. And then it enables to ease tank cleaning during operation. The coating system is applicable from SI type which enables a painter to visually confirm that the correct film thickness (wet / dry) has been achieved during application process and non-SI type.

【 Product Data 】

Suitable Use	Anti-corrosive coating for cargo oil tanks of product carriers		
Type	Phenol / Novolac epoxy		
Color	Buff [SI] Gray, Red oxide [Non-SI]		
Gloss	Flat		
Volume Solids	75 ± 2 % (ISO3233:1998)		
Dry Film Thickness	100 ~ 150 μm		
Approx. Wet Film Thickness	133 ~ 200 μm		
Theoretical Coverage	7.5m ² /L (DFT 100 μm)		
Specific Gravity	BASE : 1.55 ~ 1.65 HARDENER : 0.93 ~ 1.03 Mixed paint : 1.44 ~ 1.54		
Drying Time (DFT 100 μm)	Surface Dry	1 1/2 hours (10°C) 40 minutes (20°C) 20 minutes (30°C)	
	Dry Hard	18 hours (10°C) 12 hours (20°C) 8 hours (30°C)	
Interval before Overcoating (by self)	Min.	18 hours (10°C) 12 hours (20°C) 8 hours (30°C)	
	Max. (1)	28 days (10°C) 21 days (20°C) 15 days (30°C)	
	Max. (2)	7 days (10°C) 4 days (20°C) 3 days (30°C)	
	※ Refer to Note (7).		
Minimum time before loading		20 days (10°C) 10 days (20°C) 5 days (30°C)	
Min. DFT	80 μm		
Max. DFT	1,000 μm		
	Maximum dry film thickness is total thickness of coating system.		

【 Surface Preparation 】

Steel Preparation Use in accordance with our standard painting manual. Where necessary, remove weld spatter, smooth weld seams and remove sharp edges by grinding or power tool treatment.

Surface Cleaning All surfaces to be coated should be clean, dry and free from contamination. High pressure fresh water wash or fresh water wash, as appropriate, and remove all oil / grease, soluble contaminants and other foreign matters.

Water soluble salts limit equivalent to NaCl : ≤50 mg / m² of sodium chloride
Dust to be removed if visible on the surface to be coated without magnification.

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Secondary Surface Preparation

Intact shop primed surface shall be cleaned by abrasive blasting to Sa 2^{1/2} (ISO8501-1:2007).

Welding part and damaged area to shop primer shall be cleaned by abrasive blasting to Sa 2^{1/2} (ISO8501-1:2007).

Burnt part and corroded area to shop primer shall be cleaned by abrasive blasting to Sa 2^{1/2} (ISO8501-1:2007).

The surface profile on any areas where abrasive blasting has been carried out shall be in the range of 30 - 100 μm (ISO8503-1/2:1988).

Repair coating & touching up

When exceeding the specified overcoating intervals, surface to be overcoated, should be roughened with power-tool before application.

【 Application 】

Mixing

Material is supplied in two components as a unit. Mix a complete unit in the proportions supplied. Once the units has been mixed it must be used within the specified pot life.

(1) Agitate BASE with a power agitator.

(2) Combine HARDENER with BASE and stir thoroughly with power agitator.

Thinner

NIPPON MARINE THINNER 600

Max. allowable addition : 20% by weight.

Application Method

Airless Spray	Tip range	: 0.43 ~ 0.53 mm
		(ex. GRACO 517 - 521, 617 - 621)
	Fan angle	: 45° ~ 55°
	(For T/U)	30° ~ 35°
	Output pressure	: 150 ~ 180 Kg / cm ²

Brush / Roller For touching up small areas and stripe-coating

Mixing Ratio by Weight

BASE 88 / HARDENER 12

Pot Life After Mixing

6 hours (10°C) 3 hours (20°C) 2 hours (30°C)

Since pot life is shortened at high temperature, avoid mixing excessive amounts at one time under such conditions.

Stripe Coating

Due to the high volume solids of the product, stripe coating to the full specified film thickness may be easily achieved in two applications. However, the correct technique as outlined below must be used:

1. The roller or brush should be fully charged with paint for each application.
A roller shall be used for scallops, rat-holes etc., but not for edges and welds.
2. Light pressure on the tool will deposit more paint to the area - repeated heavy movements will tend to spread the paint more thinly and also aerate the paint - this should be avoided.
3. In the case of rough 'return welds' in scallops, the fully charged tool should be pulled into the weld and a 'side to side' motion employed to ensure that the cavities are fully coated.
4. Generally, stripe coating should only be necessary in areas that are difficult to coat by spray such as rough up-hand welds, return welds, free edges, scallops, drain holes, air holes, behind angles, stiffeners and brackets, etc.

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Stripe Coating Although NOA PC 700 exhibits very good flexibility properties over other epoxy products, it is 'good painting practice' not to over-apply coatings on welds that will be subject to stress. Stripe coating should also be avoided in areas where multiple passes by spray may be applied, such as corners or welds on right-angled structure.

【 Ambient Condition for Application 】

Ambient condition Max relative humidity : 85%
 Applicable ambient temperature : 10 ~ 40°C
 Applicable surface temperature : 10 ~ 50°C
 Min. steel temperature above Dew point : 3 °C

【 Unit Size 】

Japan : 20kg (BASE 17.6kg, HARDENER 2.4kg)
Worldwide : 16L (BASE 13.1L, HARDENER 2.9L)
Package may vary from country to country.

【 Flash Point 】 24 °C

【 Shelf Life 】 BASE : 12 months under 25°C
 HARDENER : 12 months under 25°C

【 Safety 】 Take precautions to avoid skin and eye contact (i.e. gloves, goggles, face masks, barrier creams etc.). Proper ventilation and protective measures must be provided during applications and drying to keep solvent vapour concentrations within safe limits. Prior to use, obtain, consult and follow the SDS for this product concerning health and safety information.

<Note>

- 1) The information contained in this sheet is liable to modification from time to time in light of experience and our policy of continuous product development.
- 2) Store the paints in paint store.
- 3) Discoloration (blackening) may occur on the surface due to sulphide in cargoes. Its anti-corrosive performance is not adversely affected by the discoloration.
- 4) If half-dried painted surface is subjected to rain or dew, blooming or sweating may occur, with the surface turned to white. Rub the area lightly with a wire brush before painting.
- 5) For the applications, refer to our "Suitability Table of Cargoes for Loading" and "Application Procedure".
- 6) Paint application shall be done immediately after abrasive blasting. Small rusted parts, welding seam, burnt parts shall be thoroughly treated with power tool.
- 7) Max. interval depends on exposure condition of coating. To prevent coating from sun light, cover manholes etc. with awning and so on. In case that coating is exposed to sun light, Max (2) of interval shall be adopted.