



New Guard Coatings Group

A global reputation to protect.

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This information is not exhaustive and it is the user's responsibility to ensure that this data sheet is the most current by contacting their local New Guard Coatings Group branch prior to using the coating/product.

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PHENICON® HS

EPOXY NOVOLAC PHENOLIC TANK LINING

Revised: October 3, 2023

PRODUCT DESCRIPTION

PHENICON HS is a thin film, epoxy phenolic novolac lining for tanks, pipes and secondary containment.

INTENDED USES

An API 652 compliant thin film, internal lining for the storage of crude and refined petrochemicals (full compliance with the performance and purity requirements of EI Standard 1541 for Aviation Fuel Storage - replacement for obsolete MIL-PRF-4556F specification) as well as a wide range of solvents.

PRODUCT DATA

Finish:	Semi-Gloss	Average Drying Times @ 7.0 mils wet (175 microns):			
Colors:	Off White, Light Gray, and Light Blue	<i>With standard hardener</i>	55°F (13°C)	77°F (25°C)	120°F (49°C)
Volume Solids:	75% ± 2%, mixed	Touch:	7 hours	3 hours	1 hour
VOC (EPA Method 24):	<250 g/L; 2.08 lb/gal	Handle:	48 hours	18 hours	4 hours
Mix Ratio:	4:1 by volume	Recoat:			
Typical Thickness:		minimum:	48 hours	18 hours	4 hours
		maximum:	30 days	30 days	30 days
		Cure to service:	14 days	7 days	3 days
		Pot Life:	4 hours	2 hours	30 minutes
		Sweat-in-time:	30 minutes	15 minutes	none
		<i>With low temp hardener</i>	35°F (1.6°C)	55°F (13°C)	77°F (25°C)
		Touch:	12 hours	4 hours	2 hours
		Handle:	24 hours	18 hours	12 hours
		Recoat:			
		minimum:	24 hours	18 hours	12 hours
		maximum:	30 days	30 days	30 days
		Cure to service:	7 days	5 days	5 days
		Pot Life:	4 hours	2 hours	1 hour
		Sweat-in-time:	15 minutes	none	none
		<i>Pot life is dependent upon temperature and mass</i>			
		<i>Drying time is temperature, humidity, and film thickness dependent.</i>			
		<i>If maximum recoat time is exceeded, abrade surface before recoating.</i>			

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Minimum recommended surface preparation:

Iron & Steel: Immersion: SSPC-SP10/NACE 2/ISO8501-1:2007 Sa 2.5, 2-3 mil (50-75 micron) sharp and angular profile [Medium (G) (ISO 8503-2)]

Concrete & Masonry: Immersion: SSPC-SP13/NACE 6-4.3.1 or 4.3.2, or ICRI No. 310.2R CSP 2-3



Protective & Marine Coatings
PRODUCT DATA SHEET



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APPLICATION	APPLICATION CONDITIONS															
<p>Airless Spray Pressure.....3000 psi minimum (206 bar) Hose.....3/8"-1/2" ID (9.5-12.7 mm) Tip0.17"-0.021" (0.43-0.53 mm) Filter.....60 mesh</p> <p>Conventional Spray GunBinks 95 Tip and Needle.....66/65 Air Cap.....65 PR Atomization Pressure.....65-75 psi (4.5-5.1 bar) Fluid Pressure.....15-20 psi (1.0-1.4 bar)</p> <p>Brush Brush.....Nylon/Polyester or Natural Bristle</p> <p>Roller Cover3/8" woven with solvent resistant core</p> <p>If specific application equipment is not listed above, equivalent equipment may be substituted.</p>	<p>Temperature (air & surface): Standard Hardener: 55°F (13°C) minimum, 120°F (49°C) maximum Low Temp Hardener: 35°F (1.6°C) minimum, 80°F (27°C) maximum At least 5°F (2.8°C) above dew point</p> <p>Material should be mixed at 55°F (13°C) minimum.</p> <p>Relative humidity: 85% maximum</p>															
APPROVALS																
<ul style="list-style-type: none"> This product meets specific design requirements for non-safety related nuclear plant applications in Level II, III and Balance of Plant, and DOE nuclear facilities* Acceptable for use in Canadian Food Processing facilities categories: D3 and E8 (Confirm acceptance of specific part numbers / rexes with your SW Sales Representative) In compliance with EI Standard 1541, Section 2.2 <p>* Nuclear qualifications are NRC license specific to the facility</p>																
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Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	7.0 (175)	9.0 (225)
Dry mils (microns)	5.0 (125)	7.0 (175)
~Coverage sq ft/gal (m²/L)	200 (4.9)	240 (5.9)
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	1200 (29.4)	

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Shelf Life:	36 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
Flash Point:	98°F (37°C), mixed
Reducer:	Not recommended
Clean Up:	Reducer #005
Weight:	12.45 ± 0.2 lb/gal ; 1.5 Kg/L, mixed

Pot life is dependent upon temperature and mass

Drying time is temperature, humidity, and film thickness dependent. If maximum recoat time is exceeded, abrade surface before recoating.

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