



Protective & Marine Coatings

PRODUCT DATA SHEET



NOVA-PLATE® UHS

EPOXY NOVOLAC TANK LINING

Revised: June 9, 2023

PRODUCT DESCRIPTION

NOVA-PLATE UHS is a solvent free, edge retentive epoxy novolac with proven long term performance as a lining for bulk storage tanks, pipe internals and secondary containment where a higher degree of resistance is needed.

INTENDED USES

An API 652 compliant (thin and thick film) lining for the internal protection of bulk storage tanks, vessels and pipes for the storage and processing of crude oil (at elevated temperatures), refined petrochemicals and solvents (including methanol). Superior build and pit-filling capabilities makes this lining suitable for new construction and maintenance.

PRODUCT DATA

Finish:	Gloss				Average Drying Times:			
Colors:	Light Gray, White, Green				<i>with fast cure hardener</i>	55°F (13°C)	77°F (25°C)	100°F (38°C)
Volume Solids:	100% mixed					50% RH	50% RH	50% RH
VOC (EPA Method 24):	<100 g/L; 0.83 lb/gal				Touch:	9 hours	3 hours	1.25 hours
Mix Ratio:	4:1 by volume				Handle:	24 hours	12 hours	4.25 hours
Typical Thickness:					Recoat:			
	<u>Recommended Spreading Rate per coat:</u>				minimum:	24 hours	12 hours	4.25 hours
	1 coat		2 coats direct		maximum:	21 days	21 days	14 days
	Min.	Max.	Min.	Max.	Cure to service:	7 days	5 days	5 days
Wet mils (microns)	15.0 (375)	35.0 (875)	10.0 (250)	12.0 (300)	Pot Life:	50 minutes	25 minutes	10 minutes
Dry mils (microns)	15.0 (375)	35.0 (875)	10.0 (250)	12.0 (300)	Sweat-in-time:		none required	
Total mils (microns)	15.0 (375)	35.0 (875)	20.0 (500)	24.0 (600)	<i>with standard hardener</i>	55°F (13°C)	77°F (25°C)	100°F (38°C)
~Coverage sq ft/gal (m²/L) per ct.	45 (1.1)	105 (2.6)	130 (32)	160 (3.9)		50% RH	50% RH	50% RH
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	1604 (39.4)				Touch:	15 hours	4 hours	2 hours
<i>NOTE: Brush or roll application recommended for stripe coating and repair only. Standard hardener preferred for brush & roll due to pot life.</i>					Handle:	36 hours	14 hours	6 hours
Shelf Life:	24 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).				Recoat:			
Flash Point:	>230°F (110°C), PMCC, mixed				minimum:	36 hours	14 hours	6 hours
Reducer:	Not recommended				maximum:	21 days	21 days	14 days
Clean Up:	M.E.K. or Reducer #104				Cure to service:	7 days	5 days	5 days
Weight:	11.20 ± 0.3 lb/gal ; 1.34 Kg/L, mixed				Pot Life:	90 minutes	40 minutes	20 minutes
					Sweat-in-time:		none required	
					<i>Pot life is dependent upon temperature and mass.</i>			
					<i>If maximum recoat time is exceeded, abrade surface before recoating.</i>			
					<i>Drying time is temperature, humidity, and film thickness dependent.</i>			



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APPLICATION			APPLICATION CONDITIONS	
Airless Spray Unit.....68:1 pump, minimum Pressure.....6000 psi minimum (413 bar) Hose.....3/8" ID (9.5 mm) Tip.....019"-021" (0.48-0.53 mm) Filter.....30 mesh In order to avoid blockage of airless spray equipment and hose, flush equipment at least once every hour and before periods of extended downtime with M.E.K. or Reducer #104.			Temperature (air & surface): 50°F (10°C) minimum, 110°F (43°C) maximum At least 5°F (2.8°C) above dew point Material should be 77°F (25°C) to 100°F (38°C) for optimal performance. Relative humidity: 85% maximum	
Plural Component Equipment Unit.....50:1 or greater Pressure.....4000 psi minimum (275 bar) Hose.....3/8" ID (9.5 mm) Tip.....017"-019" (0.43-0.48 mm) Fluid Temperature at tip..90°F-95°F (32°C-35°C)			APPROVALS • Meets MIL-PRF-23236, Type VII, Class 5, 7, 13 and 19, Grade C	
BrushFor stripe coating, laminate systems, and repair only Brush.....Nylon/Polyester or Natural Bristle RollerFor stripe coating, laminate systems, and repair only Cover3/8" woven with solvent resistant core			ADDITIONAL NOTES Do not tint Part A. Hardeners may be tinted with up to 1-1/2 oz per gallon with Maxitoner Colorants. Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas. Do not mix previously catalyzed material with new. Blue OAP contains fluorescent pigment.	
Consult your local Technical Service Representative for further equipment questions and best practices.			Guidance on techniques and required equipment to inspect a coating system incorporating Opti-Check OAP Technology can be found in SSPC-TU 11.	
RECOMMENDED SYSTEMS			May be applied up to 60.0 mils (1500 microns) dft in one coat if required.	
Dry Film Thickness / ct.	Mils	(Microns)		
Steel, Immersion & Atmospheric 2 Cts. Nova-Plate UHS	10.0-12.0	(250-300)		
Steel, Immersion & Atmospheric 1 Ct. Nova-Plate UHS	15.0-35.0	(375-875)		
NOTE: Nova-Plate UHS may be applied at alternate thicknesses, up to 60 mils (1,500 microns), depending on application conditions. Consult your Sherwin-Williams representative for additional information.				
The systems listed above are representative of the product's use, other systems may be appropriate.			HEALTH AND SAFETY Refer to the SDS sheet before use. Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.	
WARRANTY			DISCLAIMER The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Sheet.	
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