



Protective & Marine Coatings

NOVA-PLATE™ 325 EPOXY TANK LINING

Revised 04/2019 Issue 3

PRODUCT INFORMATION

PRODUCT DESCRIPTION

NOVA-PLATE 325 is an amine cured, glass & ceramic filled tank lining that utilises advanced novolac technology. It is engineered to protect cargo and steel tank and vessel interiors from aggressive chemicals stored and processed at high temperatures and high pressures. It provides quick return to service, high film build and can be used in applications where conventional, high-solids epoxies are not recommended.

- One coat protection
- Low VOC
- Low odour
- Extremely high film build
- Resists thermal cracking
- Excellent chemical resistance
- High temperature immersion resistance
- Plural-component application
- Norsok System 7C Approval

PRODUCT CHARACTERISTICS

Finish:	Gloss
Colour:	White
Volume Solids:	98%, ± 2%, mixed
Weight Solids:	98%, ± 2%, mixed
VOC:	91.2g/ltr, mixed
Mix Ratio:	2:1 by volume

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet microns (mils)	500 (20)	1000 (40)
Dry microns (mils)	500 (20)	1000 (40)
Theoretical Coverage m ² /ltr (sqft/gal)	1.96 (78)	0.98 (39)

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

Drying Schedule @ 750 microns (30.0mils):

	@ 10°C(50°F)	@ 25°C(77°F) 50% RH	@ 32°C(90°F)
To touch:	6.5 hours	2.5 hours	1.5 hours
To handle:	26 hours	7 hours	5 hours
To recoat:			
minimum:	6.5 hours	2.5 hours	1.5 hours
maximum:	21 days	21 days	9 days
Cure to service:	14 days	24 hours*	24 hours*

*24 hour return to service for high temperature and high pressure applications. 48 hour return to service for all other immersion. If maximum recoat time is exceeded, mechanically abrade film prior to applying additional coat.

Drying time is temperature, humidity, and film thickness dependent.

Pot Life:	40 minutes	20 minutes	15 minutes
Induction Time:	None required		

Shelf Life:	24 months Store indoors at 4.5°C (40°F) to 38°C (100°F)
Flash Point:	94°C (201°F), PMCC, mixed
Thinner:	Not recommended
Clean up:	No 13

RECOMMENDED USES

For use over prepared steel or masonry surfaces in industrial and marine exposures such as:

- Oil storage tanks up to 149°C (300°F)
- Secondary containment
- Acceptable for use with cathodic protection systems
- Ethanol storage tanks
- Suitable for use in the Mining & Minerals Industry
- Oilfield Heater/Treaters
- Oil/Water Separators
- Frac tanks with high temperature and high chemical flowback service

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP10, NACE2/Sa2½

System Tested*:

1 ct. Nova-Plate 325 @ 750 microns (30.0 mils) dft
*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060-14, CS17 wheel, 1000 cycles, 1 kg load	22.4 mg loss
Adhesion	ASTM D4541-17	>2000 psi
Autoclave	NACE TM0185, 149°C (300°F) @ 2000 pse for 4 days	No effect
Cathodic Disbondment	ASTM G8-96(2010)	0mm
	ASTM G42-11 85°C (185°F)	10mm
Dry Heat Resistance	ASTM D2485-18	232°C (450°F)
Flexibility	NACE RP0394	1.25%
Immersion in Ethanol	NACE TM0174 49°C (120°F) for 6 months	No effect
Immersion (in Sweet & Sour Crude)	NACE TM0174 149°C (300°F) for 6 months	No effect
Immersion in Fresh Water of Sea Water	ASTM D6943-15, 99°C (210°F) for 6 months	No effect
Shore D Hardness	ASTM D2240-15e1	80 minimum

*Report No. IM54.1476-10

Immersion (ambient temperature) for the following:

- 37% HCL Recommended
- Crude oil Recommended
- Fresh water Recommended
- Petrol Recommended
- Sea water..... Recommended
- Reformulated petrol Recommended
- Kerosene Recommended
- Ethanol Recommended
- Methanol Not Recommended

Epoxy coatings may darken or yellow after application and curing.



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SAFETY PRECAUTIONS

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.

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 Information and Application Bulletin.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Iron & Steel:
Immersion: SSPC-SP10/NACE 2/Sa2½
50-100 micron (2-4mils) profile

Concrete & Masonry:
Secondary Containment: SSPC-SP13/NACE2/6-4.3.1 or 4.3.2,
or ICRI No. 310.sR, CSP2-3

Surface Preparation Standards

Condition of Surface	BS EN ISO 8501-1:2007		Swedish Std. SIS055900	SSPC	NACE
White Metal	Sa 3		Sa 3	SP 5	1
Near White Metal	Sa 2.5		Sa 2.5	SP 10	2
Commercial Blast	Sa 2		Sa 2	SP 6	3
Brush-Off Blast	Sa 1		Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	C St 2	SP 2	-
	Pitted & Rusted	D St 2	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	C St 3	SP 3	-
	Pitted & Rusted	D St 3	D St 3	SP 3	-

APPLICATION CONDITIONS

Temperature:
Air & surface: 10°C (50°F) minimum,
43°C (110°F) maximum

Relative Humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:

Base: 18ltr in 20ltr pail, 3ltr in 5ltr can
Hardener: 9ltr in 12ltr pail, 1.5ltr in 2.5ltr can
Weight: 1.4 Kg/L, (10.8±0.3 lbs/gal) mixed