



## **NOVA-PLATE® UHS** EPOXY NOVOLAC TANK LINING

Revised: November 12, 2019

### **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 G   | Light Gray, White, Green |   |  | with fast cure hardener         | 55°F (13°C)<br><i>50% RH</i>    | 77°F (25°C)<br>50% RH | 100°F (38°C)<br><i>50% RH</i> |
| Volume Solids:   | 100% m  | 100% mixed               |   |  | Touch:                          | 9 hours                         | 3 hours               | 1.25 hours                    |
| VOC (EPA Method  | <b>I 24):</b> <100 g/L; 0.83 lb/gal                                   |                          |   | Handle:<br>Recoat:   | 24 hours                        | 12 hours                        | 4.25 hours            |                               |
| Mix Ratio: 4:1 by volume   |   |                          | minimum:<br>maximum:                      | 24 hours<br>21 days  | 12 hours<br>21 days             | 4.25 hours<br>14 days           |                       |                               |
| Typical Thickness  | :   |                          |   |  | Cure to service:                | 7 days                          | 5 days                | 5 days                        |
| Recommended Spreading Rate per coat:   |   |                          | Pot Life:                                 | 50 minutes   | 25 minutes                      | 10 minutes                      |                       |                               |
|  | 1   | 1 coat 2 coats direct    |   |  | Sweat-in-time:                  |                                 | none required         |                               |
|  | Min.  | Max.                     | Min.                                      | Max.   | with standard hardener          | 55°F (13°C)                     | 77°F (25°C)           | 100°F (38°C)                  |
| Wet mils (microns)   | <b>15.0</b> (375  | , (                      | 5) <b>10.0</b> (250)                      | <b>12.0</b> (300)  |                                 | 50% RH                          | 50% RH                | 50% RH                        |
| Dry mils (microns)   | <b>15.0</b> (375  | ) <b>35.0</b> (87        | 5) <b>10.0</b> (250)                      | <b>12.0</b> (300)  |                                 | 15 hours                        | 4 hours               | 2 hours                       |
| Total mils (microns)   | <b>15.0</b> (375  | ) <b>35.0</b> (87        | 5) <b>20.0</b> (500)                      | <b>24.0</b> (600)  | Handle:                         | 36 hours                        | 14 hours              | 6 hours                       |
| ~Coverage sq ft/gal (m <sup>2</sup> /L) per ct. 45 (1.1) 105 (2.6) 130 (32)  |   | <b>160</b> (3.9)         | Recoat:                                   |  |                                 |                                 |                       |                               |
| Theoretical coverage<br>(m²/L) @ 1 mil / 25 mi   |   | 1604                     | <b>4</b> (39.4)                           |  | minimum:                        | 36 hours                        | 14 hours              | 6 hours                       |
| NOTE: Brush or roll application recommended for stripe coating and repair<br>only. Standard hardener preferred for brush & roll due to pot life. |   |                          | maximum:<br>Cure to service:<br>Pot Life: | 21 days<br>7 days<br>90 minutes                                      | 21 days<br>5 days<br>40 minutes | 14 days<br>5 days<br>20 minutes |                       |                               |
|  | 24 months, unopened<br>Store indoors at 40°F (4.5°C) to 100°F (38°C). |                          |   | Sweat-in-time:   |                                 | none required                   | 20 minutes            |                               |
|  | >230°F (110°C), PMCC, mixed   |                          |   | Pot life is dependent upon temperature and mass.                     |                                 |                                 |                       |                               |
|  | Not recommended   |                          |   | If maximum recoat time is exceeded, abrade surface before recoating. |                                 |                                 |                       |                               |
|  |   |                          |   |  | Drying time is tempera          | ture, humidity, a               | and film thickness    | dependent.                    |
|  | 11.20 ± 0.3 lb/gal ; 1.34 Kg/L, mixed                                 |                          |   |  |                                 |                                 |                       |                               |
|  |   |                          |   |  |                                 |                                 |                       |                               |

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:       | Atmospheric: SSPC-SP6/NACE 3/ ISO8501-1:2007 Sa 2, 2 mil profile (50 micron) profile or |
|---------------------|---|
|                     | SSPC-SP12/NACE No. 5, WJ-3/NV-2   |
|                     | Immersion: SSPC-SP10/NACE 2, 2-3 mil (50-75 micron) profile or SSPC- SP12/NACE No. 5,   |
|                     | WJ-2/NV-2 (marine exterior hull only)   |
| Concrete & Masonry: | Atmospheric: SSPC-SP13/NACE 6, or ICRI No. 310.2R CSP 2-3                               |
|                     | Immersion: SSPC-SP13/NACE 6-4.3.1 or 4.3.2, or ICRI No. 310.2R CSP 2-3                  |





Protective & Marine Coatings

# **NOVA-PLATE<sup>®</sup> UHS** EPOXY NOVOLAC TANK LINING

| APPLICATION  | APPLICATION CONDITIONS   |  |  |
|--|--|--|--|
| Airless Spray       Unit   | Temperature (air & surface):50°F (10°C) minimum, 110°F (43°C)<br>maximum<br>At least 5°F (2.8°C) above dew point<br>Material should be 77°F (25°C) to 100°F (38°C) for optimal<br>performance.Relative humidity:85% maximum  |  |  |
|  | APPROVALS  |  |  |
| Plural Component Equipment<br>Unit   | Meets MIL-PRF-23236, Type VII, Class 5, 7, 13 and 19, Grade C  |  |  |
| Pressure   |  |  |  |
| Tip017"019" (0.43-0.48 mm)<br>Fluid Temperature at tip90°F-95°F (32°C-35°C)  | ADDITIONAL NOTES   |  |  |
| BrushFor stripe coating, laminate systems  | Do not tint Part A. Hardeners may be tinted with up to 1-1/2 oz per gallon with Maxitoner Colorants.   |  |  |
| and repair only<br>BrushNylon/Polyester or Natural Bristle<br><b>Roller</b> For stripe coating, laminate systems   | Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.<br>Do not mix previously catalyzed material with new.   |  |  |
| and repair only<br>Cover   |  |  |  |
| Consult your local Technical Service Representative for furthe equipment questions and best practices.   |  |  |  |
| RECOMMENDED SYSTEMS  | Guidance on techniques and required equipment to inspect a   |  |  |
| Dry Film Thickness / ct. <u>Mils</u> (Microns  | coating system incorporating Opti-Check OAP Technology can be found in SSPC-TU 11.   |  |  |
| Steel, Immersion & Atmospheric2 Cts.Nova-Plate UHS10.0-12.0 (250-300)  | May be applied up to 60.0 mils (1500 microns) dft in one coat if required.   |  |  |
| Steel, Immersion & Atmospheric1 Ct.Nova-Plate UHS15.0-35.0 (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.   |  |  |  |
|  | HEALTH AND SAFETY  |  |  |
| The systems listed above are representative of the product's   | Refer to the SDS sheet before use.   |  |  |
| use, other systems may be appropriate.   | Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.   |  |  |
| WARRANTY   |  |  |  |
| The Sherwin-Williams Company warrants our products to be free of manufacturin<br>defects in accord with applicable Sherwin-Williams quality control procedures. Liabil<br>for products proven defective, if any, is limited to replacement of the defective produc<br>or the refund of the purchase price paid for the defective product as determined<br>Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND<br>MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, E<br>OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AN<br>FITNESS FOR A PARTICULAR PURPOSE. | DISCLAIMER<br>The information and recommendations set forth in this Product Data Sheet are based<br>upon tests conducted by or on behalf of The Sherwin-Williams Company. Such informa-<br>tion and recommendations set forth herein are subject to change and pertain to the<br>product offered at the time of publication. Consult your Sherwin-Williams representative<br>to obtain the most recent Product Data Sheet. |  |  |