Protective & Marine Coatings
PRODUCT DATA SHEET

DURA-PLATE® UHS
EPOXY TANK LINING

Revised: May 1, 2018

PRODUCT DESCRIPTION

DURA-PLATE UHS an ultra high solids epoxy amine engineered specifically for immersion service in ballast tanks, oil tanks, and refined fuel storage tanks. The high build, edge-retentive properties of Dura-Plate UHS provide superior protection compared to conventional epoxies.

INTENDED USES

- For use over prepared steel or concrete surfaces in industrial and marine exposures
- Oil storage tank interiors, refined fuel storage tanks, potable water tanks, water pipes
- Water and waste treatment plants, buried pipe applications, primary and secondary containment areas
- Where edge protection film build properties are required

PRODUCT DATA

Volume Solids: 98% ± 2%, mixed

VOC (EPA method 24, mixed): <100 g/L; 0.83 lb/gal

Finish: Gloss

Colors: White, Light Gray, Light Green

Typical Thickness:

Recommended Spreading Rate Per Coat

	1 coat system		2 coat system	
	Min.	**Max.**	**Min.**	**Max.**
Wet mils (microns)	18 (450)	22 (550)	10 (250)	12 (300)
Dry mils (microns)	18 (450)	22 (550)	10 (250)	12 (300)
Total mils (microns)	18 (450)	22 (550)	20 (500)	24 (600)
~Coverage sq ft/gal (m2/L)	72 (1.76)	90 (2.2)	130 (3.18)	160 (3.9)
Theoretical coverage sq ft/gal (m2/L) @ 1 mil (25 microns) dft	1568 (38.4)			

NOTE: Brush or roll application recommended for stripe coating and repair only. Standard hardener preferred for brush & roll due to pot life.

Mix Ratio: 4:1 by volume

Reducer: Not recommended

Clean Up: MEK, R6K10 or R7K104 Reducer

Flash Point: >200°F (93°C), PMCC, mixed

Weight: 10.52 ± 0.2 lb/gal ; 1.26 Kg/L, mixed

Shelf Life: 36 months, unopened
Store indoors at 40°F (4.5°C) to 100°F (38°C)

Packaging:
Part A: 4 gallons (15.1L) in a 5 gallon (18.9L) container
Part B: 1 gallon (3.78L) container

Average Drying Times @ 10-22 mils wet (250-550 microns):

With standard hardener	55°F (13°C)	77°F (25°C) *50% RH*	100°F (38°C)
Touch	12 hours	5 hours	3 hours
Handle	48 hours	14 hours	8 hours
Recoat			
- Minimum	48 hours	14 hours	8 hours
- Maximum	21 days	14 days	14 days
Cure to Service	10 days	4 days	24 hours
Heat Cure	8 hours @ ambient, then 16 hrs @ 140°F (60°C) (Not NSF Approved)		
Pot Life*	30-45 minutes	30-45 minutes	20-30 minutes
Sweat-in-Time	15 minutes	None	None

Average Drying Times @ 10-22 mils wet (250-550 microns):

With low temp hardener	40°F (4.5°C)	55°F (13°C) *50% RH*	77°F (25°C)
Touch	24 hours	5 hours	3 hours
Handle	48 hours	24 hours	8 hours
Recoat			
- Minimum	48 hours	24 hours	8 hours
- Maximum	30 days	21 days	14 days
Cure to Service	7 days	5 days	3 days
Heat Cure	8 hours @ ambient, then 16 hrs @ 140°F (60°C) (Not NSF Approved)		
Pot Life*	20 minutes	20 minutes	10 minutes
Sweat-in-Time	5 minutes	None	None

**Pot life is dependent upon temperature and mass*

Drying time is temperature, humidity, and film thickness dependent. Material should be at least 50°F (10°C) for optimal performance. If maximum recoat time is exceeded, abrade surface before recoating.

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 (50 micron) profile or SSPC-SP12/NACE No. 5, WJ-3/NV-2
Immersion: SSPC-SP10/NACE 2/ISO8501-1:2007 Sa 2.5, 2-3 mil (50-75 micron) profile
or SSPC- SP12/NACE No. 5, WJ-2/NV-2

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

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APPLICATION

Airless Spray

Unit..... 74:1 pump, minimum
Pressure..... 6000 psi minimum (415 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 spray equipment and hose, flush equipment with MEK, R6K10 or R7K104 Reducer at least once every 30 minutes when using the B62V210 Hardener and after each kit when using the Low Temperature Hardener, and before periods of extended downtime.

Plural Component
Equipment ..... Acceptable

Brush ..... For stripe coating and repair only
Brush ..... Nylon/Polyester or Natural Bristle

Roller ..... For stripe coating and repair only
Cover ..... 3/8" woven with solvent resistant core

If specific application equipment is not listed above, equivalent equipment may be substituted.

RECOMMENDED SYSTEMS

Dry Film Thickness / ct.		Mils	(Microns)
Steel, Immersion (Potable Water)			
1 Ct.	Dura-Plate UHS	16-50	(400-1250)
or			
2 Cts.	Dura-Plate UHS	8-25	(200-625)
or			
3 Cts.	Dura-Plate UHS	6-16	(150-400)
Steel, Immersion & Atmospheric			
2 Cts.	Dura-Plate UHS	6-7	(150-175)
or			
1 Ct.	Dura-Plate UHS	18-22	(450-550)
or			
2 Cts.	Dura-Plate UHS	10-12	(250-300)
Steel, With Hold Primer			
1 Ct.	Macropoxy 240	1.0-1.5	(25-37)
1 Ct.	Dura-Plate UHS	18-22	(450-550)

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.

APPLICATION CONDITIONS

Temperature (air & surface):

Standard Hardeners: 50°F (10°C) minimum, 110°F (43°C) maximum
Low Temp Hardener: 40°F (4.5°C) minimum, 77°F (25°C) maximum
At least 5°F (2.8°C) above dew point

Material should be 70°F (21°C) to 85°F (29°C) or optimal performance.

Relative humidity: 85% maximum

APPROVALS

- NSF approved to Standard 61 for potable water (tanks of 1000 gallons or greater and pipes of 30" diameter or greater)
- NSF approved for one coat application up to 50.0 mils (1250 microns) dft if required
- Meets MIL-PRF-23236, Type VII, Class 5, 7, 9 and 11, Grade C (standard hardener only)
- Acceptable for use in Canadian Food Processing facilities categories: D4 (Confirm acceptance of specific part numbers / rexes with your SW Sales Representative)
- Meets or exceeds the requirements of AWWA C210-07

ADDITIONAL NOTES

Do not tint Part A.

Clear Hardeners B62V210 and B62V211 may be tinted with up to 1½ oz.per gallon with Maxitoner Colorant, Phthalo Green or Black (both NSF approved) ONLY.

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

Do not mix previously catalyzed material with new.

White B62W211 Contains OAP fluorescent pigment (NSF Approved).

Guidance on techniques and required equipment to inspect a coating system incorporating Opti-Check OAP Technology can be found in SSPC-TU 11.

Note: Recommended application procedure direct to steel: Apply a 5.0-6.0 mil (125-150 micron) coat to the substrate. Allow material to "wet" the surface. Then apply additional material, to bring total film thickness to the recommended range.

Suitable for use with cathodic protection systems.

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.

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.