June 5th, 2023

Proposal No: EVC- Naperville .750 GL

Project: Naperville – West South-West
.750 MGL Exterior Additional
Surface Prep/Zinc Application

Era Valdivia Contractors Inc. proposes to furnish all supervision, labor, material, equipment, and insurance to complete the following scope of work:

Surface prepare entire exterior metal surface on .750 MGL Hydropillar Tank, which include corrugated metal base, exterior sidewall and top roof of tank. We will apply SW Zinc Galvapac 2 K. Continue with SW 218 Urethane and SW Fluorokem HS 100 as under contract.

All material is to be as specified, and the above work to be performed in accordance with site visit and specifications provided for the above scope of work and substantially completed in a professional manner for the lump sum of: **Five Hundred Eighty One Thousand Dollars and Zero Cents ($581,000).**

Exclusions/Clarifications:

A) Statutory std insurance requirements as provided under contract in place.
B) Incidental damages caused by other trades will be charged as an extra.
C) No Caulking/No additional repairs to corrugated surfaces.
D) Cleaning /Surface preparation per zinc scope: SSPC-SP 6
E) No D/H and Heating included.
F) No Lead/Hazardous Waste Disposal – Non Haz waste disposal will apply
G) Based on one mobilization – During this contract phase.
H) No other areas will be abrasive cleaned and painted with zinc
I) Exterior tank shell above corrugated base will be surface prepped/painted as under contract.
J) Naperville approved manufacturer – SW Coatings
K) No LD's as part of this Change Order.
L) EVC needs response is writing so that we may procced with this change order request.

We appreciate your business and value your firm as a customer. If you have any questions, please call me at 773-447-6658.

Sincerely,
Era Valdivia Contractors, Inc.

Greg Bairaktaris
Project Manager
NACE Coating Inspector/CIP Bridge – Level 2 Certified
Cert. No. 26738

ACCEPTANCE OF PROPOSAL

Era Valdivia Contractors, Inc. is hereby authorized to furnish all materials, equipment, and labor required to complete the work as described in the above proposal for which the undersigned agrees to pay the amount stated in said proposal and according to the terms thereof.

Signature:_____ Date:_____

Title:_____

SSPC – QP1/QP2 Lead Certified Contractor

Protective & Marine Coatings

Certified to NSF/ANSI 61

COROTHANE® I GALVAPAC 2K ZINC PRIMER

PART A B65G10 BINDER
PART F B69D210 ZINC DUST

Revised: October 22, 2019

PRODUCT INFORMATION

5.11

PRODUCT DESCRIPTION

COROTHANE I GALVAPAC 2K ZINC PRIMER is a two component, moisture curing urethane zinc-rich primer. It is designed for low temperature application to blast cleaned or power tool cleaned steel surfaces.

- Low temperature application - down to 20°F (-7°C)
- Easy to apply and recoat
- Resistant to mudcracking
- Abrasion and chemical resistant
- Meets Class B requirements for Slip Coefficient and Creep Resistance, .54
- Enhanced coating strength and edge protection

PRODUCT CHARACTERISTICS

Finish:	Flat
Color:	Gray
Volume Solids:	67% ± 2%, mixed
Weight Solids:	91.7% ± 2%
VOC (calculated):	<340 g/L; 2.8 lb/gal, mixed
Mix Ratio:	2 components; premeasured 2.75 gallon mix
Zinc Content in Dry Film:	83% ± 2% by weight

Recommended Spreading Rate per coat:

	Standard		AWWA*	
	Min	Max	Min	Max
Wet mils (microns)	4.5 (112)	6.8 (170)	3.0 (75)	6.0 (150
Dry mils (microns)	3.0 (75)	4.0 (100)	2.0 (50)	4.0 (100)
~Coverage sq ft/gal (m^2/L)	268 (6.5)	358 (8.8)	268 (6.5)	536 (13)
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	1072 (26.2)			

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

*See Recommended Systems on Product Information page

Drying Schedule @ 5.0 mils wet (125 microns):

	@ 40°F/4.5°C	@ 77°F/25°C 50% RH	@ 100°F/38°C
To touch:	45 minutes	20 minutes	10 minutes
To recoat (min.): atmospheric service	8 hours	4-6 hours	1 hour
To recoat (min.): immersion service	24 hours	12 hours	10 hours
To recoat (max.):	12 months	12 months	12 months
To cure: atmospheric service	5 days	3 days	1 day
To cure: immersion service	14 days	7 days	5 days

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

For potable water service, consult www.nsf.org for details on recoat and dry times at indicated temperature. Sterilize and rinse per AWWA C652.

Shelf Life:	Part A - 12 months, unopened Part F - 24 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
Flash Point:	94°F (34°C), PMCC
Reducer/Clean Up:	Reducer #15, R7K15

RECOMMENDED USES

- **Immersion Service - potable water:**
  Meets NSF Standard 61 for use in potable water storage.
  - 250,000 gallon untopcoated
  - 20,000 gallon minimum topcoated
- Meets requirements of SSPC Paint Spec No. 40 for zinc rich moisture cure urethane primer
- As a primer in a urethane coating system for bridges, tanks, chemical, and marine structures
- Wind Towers - onshore and offshore
- Ideal for priming water assisted abrasive blasted surfaces where flash rusting or blooming limits the use of conventional zinc rich coatings
- Acceptable for use with cathodic protection with select topcoats
- Conforms to AWWA D102 Inside Coating System #3 (ICS-3), Inside Coating System #4 (ICS-4) Inside Coating System #5 (ICS-5), Inside Coating System #6 (ICS-6), Outside Coating System #2 (OCS-2), Outside Coating System #3 (OCS-3), Outside Coating System #4 (OCS-4), and Outside Coating System #6 (OCS-6)
- A component of INFINITANK

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP5

System Tested*:

1 ct. Corothane I GalvaPac 2K Zinc Primer @ 3.5 mils (88 microns) dft
1 ct. Corothane I MIO-Aluminum @ 3.0 mils (75 microns) dft

*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load	45 mg loss
Adhesion (Zinc only)	ASTM D4541	1943 psi
Corrosion Weathering	ASTM D5894, 15 cycles, 5000 hours	Rating 10 per ASTM D610 Rusting (field); Rating 10 per ASTM D714 Blistering
Direct Impact Resistance (Zinc only)	ASTM D2794	160 in. lb.
Dry Heat Resistance	ASTM D2485	300°F (149°C) continuous, 350°F (177°C) intermittent
Flexibility	ASTM D522, 180° bend, 1/4" mandrel	Passes
Immersion (Galvapac/2 cts Macropoxy 646 NSF)	5 year potable water	Rating 10 per ASTM D610 for Rusting; Rating 10 per ASTM D714 for Blistering
Moisture Condensation Resistance (Zinc only)	ASTM D4585, 100°F (38°C), 4000 hours	Rating 10 per ASTM D610 for Rusting; Rating 10 per ASTM D714 for Blistering
Pencil Hardness	ASTM D3363	2H (zinc only)
Salt Fog Resistance (Zinc only)	ASTM B117, 5000 hours	Rating 10 per ASTM D610 for Rusting; Rating 10 per ASTM D714 for Blistering
Slip Coefficient* (Zinc only)	AISC Specification for Structural Joints Using ASTM A325 or ASTM A490 Bolts	Class B, .54
Wet Heat Resistance	Non-Immersion	190°F (88°C)

Complies with ISO 12944-5 C5I and C5M requirements.

*Refer to Slip Certification document

continued on back

Protective & Marine Coatings

Certified to NSF/ANSI 61

COROTHANE® I GALVAPAC 2K ZINC PRIMER

PART A B65G10 BINDER
PART F B69D210 ZINC DUST

Revised: October 22, 2019

PRODUCT INFORMATION

5.11

RECOMMENDED SYSTEMS

	Dry Film Thickness / ct. Mils	(Microns)
Immersion Service, AWWA, Steel:		
*AWWA D102 Inside Coating System No. 3		
minimum AWWA	22.0	(550)
1 ct. Corothane I GalvaPac 2K Zinc Primer	2.0	(50)
1 ct. SherPlate PW Epoxy	20	(500)
*AWWA D102 Inside Coating System No. 4		
minimum AWWA	32.0	(800)
1 ct. Corothane I GalvaPac 2K Zinc Primer	2.0	(50)
1 ct. SherFlex Elastomeric	30	(750)
*AWWA D102 Inside Coating System No. 5		
minimum AWWA	10.0	(250)
1 ct. Corothane I GalvaPac 2K Zinc Primer	2.0	(50)
2 cts. Macropoxy 646 PW	4.0	(100)
Immersion Service, Potable Water, Steel:		
1 ct. Corothane I GalvaPac 2K Zinc Primer	3.0-4.0	(75-100)
2 cts. Macropoxy 646 PW	5.0-10.0	(125-250)
Immersion Service, Potable Water, Ductile Iron Pipe:		
1 ct. Corothane I GalvaPac 2K Zinc Primer	3.0-4.0	(75-100)
2 cts. Macropoxy 646 PW	5.0-10.0	(125-250)
Immersion Service, Non-Potable Water, Steel:		
1 ct. Corothane I GalvaPac 2K Zinc Primer	3.0-4.0	(75-100)
2 cts. Corothane I Coal Tar	5.0-7.0	(125-175)
Atmospheric Service, Steel:		
*AWWA D102 Outside Coating System No. 2		
minimum AWWA	6.5	(188)
1 ct. Corothane I GalvaPac 2K Zinc Primer	2.0	(50)
1 ct. Corothane Ironox B	3.0	(75)
1 ct. Corothane I HS	1.5	(40)
*AWWA D102 Outside Coating System No. 3		
minimum AWWA	7.5	(188)
1 ct. Corothane I GalvaPac 2K Zinc Primer	2.0	(50)
1 ct. DTM/SherCryl/SprayLastic	2.0	(50)
1 ct. Corothane I HS	2.0	(50)
*AWWA D102 Outside Coating System No. 4		
minimum AWWA	7.5	(188)
1 ct. Corothane I GalvaPac 2K Zinc Primer	2.0	(50)
1 ct. Acrolon 218HS/HS Polyurethane	3.0	(75)
1 ct. FluoroKem HS	2.0	(50)
*AWWA D102: Outside Coating System No. 6		
minimum AWWA	6.0	(150)
1 ct. Corothane I GalvaPac 2K Zinc Primer	2.0	(50)
1 ct. Macropoxy 646 PW	2.0	(50)
1 ct. Acrolon Ultra/HS Polyurethane	2.0	(50)
Steel, Rapid Return to Service:		
1 ct. Corothane I GalvaPac 2K Zinc Primer	3.0-4.0	(75-100)
1 ct. EnviroLastic 980 PA	6.0-9.0	(150-225)
ISO 12944 C5M System:		
1 ct. Corothane I GalvaPac 2K Zinc Primer	3.0-4.0	(75-100)
1 ct. EnviroLastic 980 PA	6.0-9.0	(150-225)

Acceptable for use over Zinc Clad PCP Ultra. Topcoat required.

The systems listed above are representative of the product's use, other systems may be appropriate.

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.

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

Atmospheric: SSPC-SP6/NACE 3, 2 mil (50 micron) profile preferred

Immersion, with recommended topcoat: SSPC-SP10, 2 mil (50 micron) profile

Ductile Iron Pipe:

Atmospheric: NAPF 500-03-03 Power Tool Cleaning

Immersion: NAPF 500-03-04 Abrasive Blast Cleaning

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	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	-

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature:

air and surface: 20°F (-7°C) minimum, 120°F (49°C) maximum

material: 45°F (7°C) minimum

Do not apply over surface ice

Relative humidity: 30% minimum, 99% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:

Part A: 1.73 gallons (6.5L) in a 3 gallon (11.3L) container

Part F: 60 lb zinc dust, 7.2 Kg/L

Weight: 28.5 ± 0.2 lb/gal, 3.42 Kg/L

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.

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.

Protective & Marine Coatings

Certified to NSF/ANSI 61

COROTHANE® I GALVAPAC 2K ZINC PRIMER

PART A B65G10 — BINDER
PART F B69D210 — ZINC DUST

Revised: October 22, 2019

APPLICATION BULLETIN

5.11

SURFACE PREPARATIONS

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.

Iron & Steel, Immersion Service:
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Remove all weld spatter and round all sharp edges by grinding. Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Iron & Steel: Atmospheric Service:
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils / 50 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Ductile Iron Pipe, Atmospheric Service:
Minimum surface preparation is Power Tool Clean per NAPF 500-03-03. Remove all oil and grease from surface by Solvent Cleaning per NAPF 500-03-01.

Ductile Iron Pipe, Immersion Service:
Minimum surface preparation is Abrasive Blast Cleaning per NAPF 500-03-04. Ductile iron pipe external surfaces, in some cases, can be damaged by excessive abrasive blast cleaning beyond this standard. Remove all oil and grease from surface by Solvent Cleaning per NAPF 500-03-01.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	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 and surface: 20°F (-7°C) minimum
120°F (49°C) maximum
material: 45°F (7°C) minimum

Do not apply over surface ice

Relative humidity: 30% minimum, 99% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up .....Reducer #15, R7K15

Airless Spray
Pump.....30:1
Pressure.....1800-2000 psi
Hose.....1/4" ID
Tip.....015" - .019"
Filter.....60 mesh
Reduction.....As needed up to 10% by volume

Conventional Spray

Unit	Graco	Binks
Gun	900	95
Fluid Nozzle	070	66/65
Air Nozzle	947	63PR
Atomization Pressure	60-70 psi	60-70 psi
Fluid Pressure	15-20 psi	15-20 psi

Reduction.....As needed up to 10% by volume

Brush
Brush.....Natural bristle
Reduction.....As needed up to 10% by volume

Roller
Cover.....3/8" natural or synthetic with solvent resistant core
Reduction.....As needed up to 10% by volume

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

continued on back

Protective & Marine Coatings

NSF® Certified to NSF/ANSI 61

COROTHANE® I GALVAPAC 2K ZINC PRIMER

PART A B65G10 BINDER
PART F B69D210 ZINC DUST

Revised: October 22, 2019

APPLICATION BULLETIN

5.11

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Corothane I - GalvaPac Zinc Primer comes in 2 premeasured containers which when mixed provides 2.75 gallons (10.4L) of ready-to-apply material.

Mixing Instructions: Thoroughly agitate Binder Part A. Using continuous air driven agitation, slowly mix all 60 lbs. of Zinc Dust, B69D210, Part F into Binder Part A until mixture is completely uniform. After mixing, pour mixture through 30-60 mesh screen. Mixed material must be used within 8 hours. Do not mix previously mixed material with new.

If reducer solvent is used, add only after both components have been thoroughly mixed.

Recommended Spreading Rate per coat:

	Standard		AWWA*	
	Min	Max	Min	Max
Wet mils (microns)	4.5 (112)	6.8 (170)	3.0 (75)	6.0 (150)
Dry mils (microns)	3.0 (75)	4.0 (100)	2.0 (50)	4.0 (100)
~Coverage sq ft/gal (m^2/L)	268 (6.5)	358 (8.8)	268 (6.5)	536 (13)
Theoretical coverage sq ft/gal (m^2/L) @ 1 mil / 25 microns dft	1072 (26.2)			

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

*See Recommended Systems on Product Information page

Drying Schedule @ 5.0 mils wet (125 microns):

	@ 40°F/4.5°C	@ 77°F/25°C 50% RH	@ 100°F/38°C
To touch:	45 minutes	20 minutes	10 minutes
To recoat (min.): atmospheric service	8 hours	4-6 hours	1 hour
To recoat (min.): immersion service	24 hours	12 hours	10 hours
To recoat (max.):	12 months	12 months	12 months
To cure: atmospheric service	5 days	3 days	1 day
To cure: immersion service	14 days	7 days	5 days

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

For potable water service, consult www.nsf.org for details on recoat and dry times at indicated temperature. Sterilize and rinse per AWWA C652.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #15, R7K15. Clean tools immediately after use with Reducer #15, R7K15. Follow manufacturer's safety recommendations when using any solvent.

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.

PERFORMANCE TIPS

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

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, adhesion, and NSF 61 approval.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #15, R7K15.

Pour a small amount of Reducer #15, R7K15 over the top of the paint in the can to prevent skinning or gelling.

Place a temporary cover over the pail to keep excessive moisture, condensation, fog, or rain from contaminating the coating.

Do not use continuous agitation.

It is recommended that partially used cans not be sealed/closed for use at a later date.

An intermediate coat is recommended to provide a uniform appearance of the topcoat.

Corothane I KA Accelerator is acceptable for use (except NSF applications). See data page 5.98 for details.

Corothane I GalvaPac 2K Zinc Primer can be used as a dryfall coating in certain environmental conditions. Test product before each application. Test by spraying 15-25 feet toward paint container. All material should readily wipe clean. Temperature and humidity will affect ability to dryfall. Hot surface will cause overspray to bond to surface. Always clean overspray immediately from hot surfaces.

Refer to Product Information sheet for additional performance characteristics and properties.

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.

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.

Protective & Marine Coatings

ACROLON™ 218 HS
ACRYLIC POLYURETHANE

PART A	B65-600	GLOSS SERIES
PART A	B65-650	SEMI-GLOSS SERIES
PART B	B65V600	HARDENER

Revised: July 6, 2020

PRODUCT INFORMATION

5.22

PRODUCT DESCRIPTION

ACROLON 218 HS is a polyester modified, aliphatic, acrylic polyurethane formulated specifically for in-shop applications. Also suitable for industrial applications. A fast drying, urethane that provides color and gloss retention for exterior exposure.

- Can be used directly over organic zinc rich primers (epoxy zinc primer and moisture cure urethane zinc primer)
- Color and gloss retention for exterior exposure
- Fast dry
- Outstanding application properties

PRODUCT CHARACTERISTICS

Finish:	Gloss or Semi-Gloss
Color:	Wide range of colors available
Volume Solids:	65% ± 2%, mixed, may vary by color
Weight Solids:	78% ± 2%, mixed, may vary by color
VOC (EPA Method 24):	Unreduced: <300 g/L; 2.5 lb/gal
mixed	Reduced 10% with R7K15: <340 g/L; 2.8 lb/gal
mixed	Reduced 9% with MEK, R6K10: <340 g/L; 2.8 lb/gal
Mix Ratio:	6:1 by volume, 1 gallon or 5 gallon mixes premeasured components

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**4.5** (112.5)	**9.0** (225)
Dry mils (microns)	**3.0** (75)	**6.0** (150)
~Coverage sq ft/gal (m^2/L)	**175** (4.3)	**346** (8.5)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**1040** (25.5)	

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

Drying Schedule @ 6.0 mils wet (150 microns):

	@ 35°F/1.7°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	4 hours	1 hour	20 minutes
To handle:	18 hours	9 hours	4 hours
To recoat:			
minimum:	18 hours	8 hours	6 hours
maximum:	3 months	3 months	3 months
To cure:	14 days	7 days	5 days
Pot Life: (reduced 5% with Reducer R7K15)	4 hours	2 hours	45 minutes
Sweat-in-Time:		None	

Drying time is temperature, humidity, and film thickness dependent.
Paint temperature must be at least 40°F (4.5°C) minimum.

Shelf Life:	Part A* - 36 months, unopened Part B - 24 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
*Aluminum (Part A, Rex # B65SW655) has a shelf life of 24 months.	
Flash Point:	55°F (13°C), Seta, mixed
Reducer/Clean Up:	
Spray:	Reducer R7K15, MEK R6K10, R7K111, Reducer #58
Brush / Roll:	Reducer #132, Reducer #58, R7K111

RECOMMENDED USES

Specifically formulated for in-shop applications.
For use over prepared metal and masonry surfaces in industrial environments such as:

- Structural steel
- Rail cars and locomotives
- Conveyors
- Bridges
- Wind Towers - onshore and offshore
- Offshore platforms - exploration and production
- Suitable for use in USDA inspected facilities
- Conforms to AWWA D102 Outside Coating Systems #4 (OCS-4), #5 (OCS-5) & #6 (OCS-6)
- Acceptable for use in high performance architectural applications
- Acceptable for use over and/or under Loxon S1 and Loxon H1 Caulking
- A component of INFINITANK
- Over FIRETEX® hydrocarbon systems
- Suitable for use in the Mining & Minerals Industry
- Tank exteriors
- Pipelines
- Ships

PERFORMANCE CHARACTERISTICS

Substrate*: Steel

Surface Preparation*: SSPC-SP10/NACE 2

System Tested*:
1 ct. Macropoxy 646 @ 6.0 mils (150 microns) dft
1 ct. Acrolon 218 HS Gloss @ 4.0 mils (100 microns) dft
*unless otherwise noted below

Test Name	Test Method	Results
Abrasion Resistance[1]	ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load	43 mg loss
Adhesion[3]	ASTM D4541	1976 psi
Corrosion Weathering[3]	ASTM D5894, 27 cycles, 9072 hours	Rating 10 per ASTM D610, for rusting; Rating 10 per ASTM D714, for blistering
Direct Impact Resistance[1]	ASTM D2794	70 in. lb.
Dry Heat Resistance[1]	ASTM D2485, Method A	200°F (93°C)
Flexibility[1]	ASTM D522, 180° bend, 1/8" mandrel	Passes
Humidity Resistance[2]	ASTM D4585, 100°F (38°C), 1500 hours	Rating 10 per ASTM D610, for rusting; Rating 10 per ASTM D714, for blistering
Pencil Hardness	ASTM D3363	3H
Salt Fog Resistance[3]	ASTM B117, 15,000 hours	Rating 10 per ASTM D610, for rusting; Rating 10 per ASTM D714, for blistering

Meets the requirements of SSPC Paint No. 36, Level 3 for white and light colors. Dark colors may require a clear coat.

Complies with ISO 12944-5 C5I and C5M requirements.

Footnotes:
[1] Finish coat only tested
[2] Primer — Zinc-Clad II Plus
Intermediate — Macropoxy 646
Finish — Acrolon 218 HS
[3] Primer — Zinc-Clad III HS

continued on back

Protective & Marine Coatings

ACROLON™ 218 HS
ACRYLIC POLYURETHANE

PART A	B65-600	GLOSS SERIES
PART A	B65-650	SEMI-GLOSS SERIES
PART B	B65V600	HARDENER

Revised: July 6, 2020

PRODUCT INFORMATION

5.22

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Steel:			
1 ct.	Macropoxy 646	5.0-10.0	(125-250)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Steel:			
1 ct.	Zinc Clad II Plus	3.0-5.0	(75-125)
1 ct.	Macropoxy 646	5.0-10.0	(125-250)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Steel:			
1 ct.	Zinc Clad IV	3.0-5.0	(75-125)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Steel:			
1 ct.	Corothane I-GalvaPac Zinc Primer	3.0-4.0	(75-100)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Steel:			
1 ct.	Epoxy Mastic Aluminum II	6.0	(150)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Steel:			
1 ct.	Recoatable Epoxy Primer	4.0-6.0	(100-150)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Concrete/Masonry:			
1 ct.	Kem Cati-Coat HS Epoxy Filler/Sealer	10.0-20.0	(250-500)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)
Aluminum/Galvanizing:			
1 ct.	DTM Wash Primer	0.7-1.3	(18-32)
1-2 cts.	Acrolon 218 HS Polyurethane	3.0-6.0	(75-150)

FIRETEX ONLY:
Finish Coat for FIRETEX Hydrocarbon Systems:
1 ct. Acrolon 218 HS Polyurethane*
*Consult FIRETEX PFP Specialist for recommended dft range

The systems listed above are representative of the product's use, other systems may be appropriate.

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.

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: SSPC-SP6/NACE 3, 1-2 mil (25-50 micron) profile
* Galvanizing: SSPC-SP1
* Concrete & Masonry: SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3

* Primer required

Surface Preparation Standards

Condition of Surface		ISO 8501-1 BS7079:A1	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	-

TINTING

Tint Part A with Maxitoner Colorants.
- Extra white tints at 100% tint strength
- Ultradeep base tints at 150% tint strength

Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

Temperature:	35°F (1.7°C) minimum, 120°F (49°C) maximum (air and surface) 40°F (4.5°C) minimum, 120°F (49°C) maximum (material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:	1 gallon (3.78L) mix:	5 gallon (18.9L) mix:
Part A:	.86 gal (3.25L)	4.29 gal (16.2L)
Part B:	.14 gal (0.53L)	0.71 gal (2.7L)
(premeasured components)		

Weight: 11.2 ± 0.2 lb/gal ; 1.3 Kg/L mixed, may vary with color

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.

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.

Protective & Marine Coatings

ACROLON™ 218 HS
ACRYLIC POLYURETHANE

PART A	B65-600	GLOSS SERIES
PART A	B65-650	SEMI-GLOSS SERIES
PART B	B65V600	HARDENER

Revised: July 6, 2020

APPLICATION BULLETIN

5.22

SURFACE PREPARATIONS

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.

Iron & Steel
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (1-2 mils / 25-50 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Aluminum
Remove all oil, grease, dirt, oxide and other foreign material by Solvent Cleaning per SSPC-SP1. Primer required.

Galvanized Steel
Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1. When weathering is not possible, or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned or before flash rusting occurs. Primer required.

Concrete and Masonry
For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer required.

Follow the standard methods listed below when applicable:
ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
ICRI No. 310.2R Concrete Surface Preparation.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	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:	35°F (1.7°C) minimum, 120°F (49°C) maximum (air and surface) 40°F (4.5°C) minimum, 120°F (49°C) maximum (material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer/Clean Up:
Spray.....Reducer R7K15, MEK, Reducer #58, or R7K111
Brush/Roll.....Reducer #132, R7K132, Reducer #58, or R7K111
If reducer is used, reduce at time of catalyzation.

Airless Spray
Pressure.....2500 - 2800 psi
Hose.....3/8" ID
Tip.....013" - .017"
Filter.....60 mesh
Reduction.....As needed up to 10% by volume with R7K15 or R7K111, or up to 9% with MEK, R6K10*

Conventional Spray
Gun.....Binks 95
Cap.....63P
Atomization Pressure.....50 - 70 psi
Fluid Pressure.....20 - 25 psi
Reduction.....As needed up to 10% by volume with R7K15 or R7K111, or up to 9% with MEK, R6K10*

Brush
Brush.....Natural Bristle
Reduction.....As needed up to 10% by volume*

Roller
Cover.....3/8" woven with solvent resistant core
Reduction.....As needed up to 10% by volume*

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

* Note: Reducing more than maximum recommended level will result in VOC exceeding 340g/L

continued on back

Protective & Marine Coatings

ACROLON™ 218 HS
ACRYLIC POLYURETHANE

PART A	B65-600	GLOSS SERIES
PART A	B65-650	SEMI-GLOSS SERIES
PART B	B65V600	HARDENER

Revised: July 6, 2020

APPLICATION BULLETIN

5.22

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine six parts by volume of Part A with one part by volume of Part B (premeasured components). Thoroughly agitate the mixture with power agitation. Re-stir before using.

If reducer is used, add only after both components have been thoroughly mixed.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**4.5** (112.5)	**9.0** (225)
Dry mils (microns)	**3.0** (75)	**6.0** (150)
~Coverage sq ft/gal (m^2/L)	**175** (4.3)	**346** (8.5)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**1040** (25.5)	

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

Drying Schedule @ 6.0 mils wet (150 microns):

	@ 35°F/1.7°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	4 hours	1 hour	20 minutes
To handle:	18 hours	9 hours	4 hours
To recoat:			
minimum:	18 hours	8 hours	6 hours
maximum:	3 months	3 months	3 months
To cure:	14 days	7 days	5 days
Pot Life: (reduced 5% with Reducer R7K15)	4 hours	2 hours	45 minutes
Sweat-in-Time:		None	

Drying time is temperature, humidity, and film thickness dependent. Paint temperature must be at least 40°F (4.5°C) minimum.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #132, R7K132. Clean tools immediately after use with Reducer #132, R7K132. Follow manufacturer's safety recommendations when using any solvent.

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.

PERFORMANCE TIPS

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

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Reducer #15, R7K15 or MEK, R6K10.

Mixed coating is sensitive to water. Use water traps in all air lines. Moisture contact can reduce pot life and affect gloss and color.

Quick-Thane Urethane Accelerator is acceptable for use. See data page 5.97 for details.

E-Z Roll Urethane Defoamer is acceptable for use. See data page 5.99 for details.

If maximum recoat time is exceeded, a light abrasion may be necessary to roughen the surface to promote adhesion before recoating.

When over coating for maintenance or covering graffiti, solvent clean with MEK or similar solvent/cleaner prior to overcoating.

Refer to Product Information sheet for additional performance characteristics and properties.

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.

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.

Protective & Marine Coatings

FLUOROKEM® HS 100

Part A	B65-1560	Satin
Part A	B65-1570	Semi-Gloss
Part A	B65-1580	Gloss
Part B	B65V1580	Hardener

Revised: December 4, 2020

APPLICATION BULLETIN

5.39

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mix contents of each component thoroughly with low speed power agitation. Make certain no pigment remains on the bottom of the can. Then combine 4 parts by volume of Part A with 1 part by volume of Part B. Thoroughly agitate the mixture with slow speed power agitation for 2-3 minutes.

If reducer solvent is used, add only after both components have been thoroughly mixed.

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.0** (75)	**5.0** (125)
Dry mils (microns)	**2.0** (50)	**3.0** (75)
~Coverage sq ft/gal (m^2/L)	**325** (8.0)	**490** (12)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**978** (24)	

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	8 hours	2 hours	1 hour
To handle:	24 hours	5 hours	2 hours
To recoat:			
minimum:	24 hours	5 hours	2 hours
maximum:	45 days	45 days	45 days
To cure:	10 days	7 days	5 days
If maximum recoat time is exceeded, abrade surface before recoating.			
Drying time is temperature, humidity, and film thickness dependent.			
Pot Life:	2.5 hours	2 hours	<1 hour
Sweat-in-Time:		None required	

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #15 (R7K15), R7K111, or Oxsol 100. Clean tools immediately after use with Reducer #15 (R7K15), Reducer #111 (R7K111), or Oxsol 100. Follow manufacturer's safety recommendations when using solvent.

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.

PERFORMANCE TIPS

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, over thinning, climate conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not apply the material beyond recommended pot life.

Do not mix previously catalyzed material with new.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended down time with Reducer #15 (R7K15), Reducer #111 (R7K111), or Oxsol 100.

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

Always test adhesion by applying a test patch of 2-3 square feet. Allow to dry one week before checking adhesion.

This product is moisture sensitive. Avoid moisture contamination.

Temperatures above 77°F (25°C) will shorten pot life.

FluoroKem HS 100 should not be applied directly over an epoxy coating, especially in exterior applications.

Refer to Product Information sheet for additional performance characteristics and properties.

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.

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.

Protective & Marine Coatings

FLUOROKEM® HS 100

Part A	B65-1560	Satin
Part A	B65-1570	Semi-Gloss
Part A	B65-1580	Gloss
Part B	B65V1580	Hardener

Revised: December 4, 2020

PRODUCT INFORMATION

5.39

PRODUCT DESCRIPTION

FLUOROKEM HS 100 is a premium, ultra-durable ambient cured high solids fluoropolymer urethane finish. It provides unparalleled color and gloss performance.

- Superior exterior durability
- Fast dry
- Less than 100 g/l VOC
- Chemical and abrasion resistant
- Airless, conventional spray, and brush and roll application
- Ambient temperature cure

PRODUCT CHARACTERISTICS

Finish:	Gloss, Semi-Gloss, Satin
Color:	Wide range of colors available
Volume Solids:	61% ± 2%, mixed, may vary by color
Weight Solids:	71% ± 2%, mixed, may vary by color
Mix Ratio:	4:1 by volume
VOC (unreduced):	<100 g/l ; 0.83 lb/gal, mixed, may vary by color

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	**3.0** (75)	**5.0** (125)
Dry mils (microns)	**2.0** (50)	**3.0** (75)
~Coverage sq ft/gal (m^2/L)	**325** (8.0)	**490** (12)
Theoretical coverage **sq ft/gal** (m^2/L) @ 1 mil / 25 microns dft	**978** (24)	

Drying Schedule @ 4.0 mils wet (100 microns):

	@ 50°F/10°C	@ 77°F/25°C *50% RH*	@ 120°F/49°C
To touch:	8 hours	2 hours	1 hour
To handle:	24 hours	5 hours	2 hours
To recoat:			
minimum:	24 hours	5 hours	2 hours
maximum:	45 days	45 days	45 days
To cure:	10 days	7 days	5 days

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

Pot Life:	2.5 hours	2 hours	<1 hour
Sweat-in-Time:		None required	

Shelf Life:	12 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
Flash Point:	40°F (4.5°C), PMCC or SETA, mixed
Reducer:	
Below 75°F (24°C):	R7K111 (up to 15% by volume)
Between 75°F (24°C) and 90°F (32°C):	ES56* (up to 5%-10% by volume)
Above 90°F (32°C):	ES56* (up to 15% by volume)
*sales number: 577-9707	
Clean Up:	Reducer #15 (R7K15), Reducer #111 (R7K111), or Oxsol 100

RECOMMENDED USES

Interior or exterior exposure where extreme weather durability is required.

- Water tanks
- Storage tank exteriors
- Bridges
- Marine
- Municipal building
- Fascias
- Iconic structures
- Stadiums
- Sports complexes
- Museums
- Schools
- High visibility areas
- Logos

PERFORMANCE CHARACTERISTICS

Substrate*: Blasted Steel
Surface Preparation*: SSPC-SP10/NACE 2
System Tested*:
Corothane I GalvaPac 1K Zinc Primer @ 2.5 mils (63 microns) dft
Acrolon 218 HS @ 2.0 mils (50 microns) dft
Fluorokem HS 100 @ 2.0 mils (50 microns) dft
*unless otherwise noted below

Test Name	Test Method	Results
Adhesion	ASTM D4541	2,655 psi
Corrosion Resistance	ASTM B117	3,000 hours
Direct Impact Resistance	ASTM G14	80 in. lb.
Dry Heat Resistance	ASTM D2485	200°F (93°C)
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Humidity Resistance	ASTM D4585	3,000 hours
Pencil Hardness	ASTM D3363	F

continued on back

Protective & Marine Coatings

FLUOROKEM® HS 100

Part A	B65-1560	Satin
Part A	B65-1570	Semi-Gloss
Part A	B65-1580	Gloss
Part B	B65V1580	Hardener

Revised: December 4, 2020

PRODUCT INFORMATION

5.39

RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils	(Microns)
Steel, Atmospheric:			
1 ct.	Corothane I GalvaPac	3.0-4.0	(75-100)
1 ct.	Acrolon 218 HS	3.0-6.0	(75-150)
or	Hi-Solids Polyurethane 250	3.0-5.0	(75-125)
or	Sher-Loxane 800	4.0-6.0	(100-150)
1-2 cts.	FluoroKem HS 100	2.0-3.0	(50-75)
1 ct.	Dura-Plate 235	4.0-8.0	(100-200)
or	Macropoxy 646 Fast Cure	5.0-10.0	(125-250)
or	Epoxy Mastic Aluminum II	4.0-6.0	(100-150)
1 ct.	Acrolon 218 HS	3.0-6.0	(75-150)
or	Hi-Solids Polyurethane 250	3.0-5.0	(75-125)
1-2 cts.	FluoroKem HS 100	2.0-3.0	(50-75)
Concrete/Masonry - Smooth:			
1 ct.	Macropoxy 646 Fast Cure	5.0-10.0	(125-250)
1 ct.	Acrolon 218 HS	3.0-6.0	(75-150)
or	Hi-Solids Polyurethane 250	3.0-5.0	(75-125)
1-2 cts.	FluoroKem HS 100	2.0-3.0	(50-75)

NOTE: this fluoropolymer product, FluoroKem HS 100, should not be applied directly over an epoxy coating, especially in exterior applications.

The systems listed above are representative of the product's use, other systems may be appropriate.

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.

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: SSPC-SP6/NACE 3
*Concrete & Masonry: SSPC-SP13/NACE 6 or ICRI No. 310.2R, CSP 1-3
*Prime with recommended primers as needed.

Surface Preparation Standards

Condition of Surface		ISO 8501-1 BS7079:A1	SSPC	NACE
White Metal		Sa 3	SP 5	1
Near White Metal		Sa 2.5	SP 10	2
Commercial Blast		Sa 2	SP 6	3
Brush-Off Blast		Sa 1	SP 7	4
Hand Tool Cleaning	Rusted	C St 2	SP 2	-
	Pitted & Rusted	D St 2	SP 2	-
Power Tool Cleaning	Rusted	C St 3	SP 3	-
	Pitted & Rusted	D St 3	SP 3	-

TINTING

Do not tint. Custom color matches are available through the Rapid Response Program. Contact your Sherwin-Williams representative for additional information.

APPLICATION CONDITIONS

Temperature:	40°F (4.5°C) minimum, 120°F (49°C) maximum (air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

ORDERING INFORMATION

Packaging:	
Part A:	1 gallon (3.78L) and 5 gallon (18.9L) containers
Part B:	Quart (0.94L) and 1 gallon (3.78L) containers
Weight (varies by color):	10.3-12.8 ± 0.2 lb/gal ; 1.23-1.53 Kg/L

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.

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.

Protective & Marine Coatings

FLUOROKEM® HS 100

Part A	B65-1560	Satin
Part A	B65-1570	Semi-Gloss
Part A	B65-1580	Gloss
Part B	B65V1580	Hardener

Revised: December 4, 2020

APPLICATION BULLETIN

5.39

SURFACE PREPARATIONS

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.

Iron & Steel

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2-3 mils / 50-75 microns). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

Concrete and Masonry

For surface preparation, refer to SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP 1-3. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F (24°C). Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with Steel-Seam FT910. Primer required.

Follow the standard methods listed below when applicable:

ASTM D4258 Standard Practice for Cleaning Concrete.
ASTM D4259 Standard Practice for Abrading Concrete.
ASTM D4260 Standard Practice for Etching Concrete.
ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete.
SSPC-SP 13/Nace 6 Surface Preparation of Concrete.
ICRI No. 310.2R Concrete Surface Preparation.

Surface Preparation Standards

	Condition of Surface	ISO 8501-1 BS7079:A1	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:	40°F (4.5°C) minimum, 120°F (49°C) maximum (Air, surface, and material) At least 5°F (2.8°C) above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

Reducer:

Below 75°F (24°C):.....Reducer #111 (R7K111), up to 15% by volume
Between 75°F (24°C) and 90°F (32°C):.....ES56*, up to 5%-10% by volume
Above 90°F (32°C): .....ES56*, up to 15% by volume

*sales number: 577-9707

Clean Up: .....Reducer #15 (R7K15), Reducer #111 (R7K111), or Oxsol 100

Airless Spray

Pump.....45:1 at 1gpm or greater
Pressure.....1500-2500 psi
Hose.....1/4" ID
Tip.....013" - .017"
Filter.....60 mesh
Reduction.....see Reducer options above

Brush

Brush.....Natural Bristle
Reduction.....see Reducer options above

Roller

Cover..... 3/8" woven with solvent resistant core
Reduction.....see Reducer options above

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

continued on back