



Protective
&
Marine
Coatings



Certified to
NSF/ANSI/CAN 61

Meeting Health
Effects Requirements
of NSF/ANSI/CAN
600

ZINC PLATE ULTRA II PCP

PART A
PART B

B69V410
B69-410 SERIES

BINDER
PASTE

Revised: January 2, 2024

PRODUCT INFORMATION

6.24

PRODUCT DESCRIPTION

ZINC PLATE ULTRA II PCP is an inorganic preconstruction zinc shop primer providing heat-resistance up to 1472°F (800°C), excellent welding properties, and resistance to zinc salt formation caused by weathering. It is also designed to minimize the generation of zinc fume comparing with typical zinc silicate shop primers. Zinc Plate Ultra II PCP provides productivity, efficiency and flexibility together with improved working environments.

- NSF approved to Standard 61/600 for potable water
- High heat exposure
- Minimizes need for repair after welding, cutting, or fairing
- Minimizes zinc fume generation

PRODUCT CHARACTERISTICS

Finish:	Flat
Color:	Gray, Green, and Red
Volume Solids:	32.5% ± 2% (per ISO3233), mixed
Weight Solids:	54% ± 2%, mixed
VOC (EPA Method 24):	585 g/L; 4.8 lb/gal, mixed
Zinc Content in Dry Film:	53.2% ± 2% by weight
Mix Ratio:	1.74A:1B by volume

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	1.5 (40)	3.6 (90)
Dry mils (microns)	0.5 (13)	1.2 (30)
~Coverage sq ft/gal (m ² /L)	433 (10.6)	1040 (25.4)
Theoretical coverage sq ft/gal (m ² /L) @ 1 mil / 25 microns dft	520 (12.7)	

Drying Schedule:

	@ 41°F/5°C	@ 68°F/20°C	@ 86°F/30°C
Surface dry:	5 minutes	2 minutes	1 minute
Dry hard:	10 minutes	5 minutes	3 minutes
To topcoat:			
minimum:	10 days	7 days	5 days
maximum:	-	-	-
Drying time is temperature, humidity, and film thickness dependent. Relative humidity below 50% may impede dry/cure times Minimum temperature for curing is 32°F (0°C). Must be fully cured prior to topcoating.			
Pot Life:	32 hours	24 hours	16 hours

Shelf Life:	6 months, unopened Store indoors at 40°F (4.5°C) to 100°F (38°C).
Flash Point:	53°F (11°C)
Reducer/Clean Up:	Reducer #58 (0 ~ 25%, up to one quart per mixed gallon)

RECOMMENDED USES

Super heat-resistant long-exposure shop primer for steel plate

CERTIFICATE APPROVALS

When used as part of an approved system/scheme, this material has the following certifications:

- **NSF Standard 61/600:** Potable Water Storage for tanks 200,000 gallons (756,000 L) minimum, topcoat recommended.
- **Weld Quality:** Shop Primers for Corrosion Protection of Steel Plates & Sections (DNV)
- **Thermal Cutting:** ISO 17652-3 Influence of Primer of Max. Speed Usable for Thermal Cutting
- **Weld Fume Generation:** ISO 17652-4 Emission of Fumes and Gases

PERFORMANCE CHARACTERISTICS

System Tested*:

1 ct. Zinc Plate Ultra II PCP @ 0.8 mils (20 microns) dft
*unless otherwise noted below

Test Name	Test Method	Results
Adhesion	ASTM D3359	5B
Direct Impact Resistance	ASTM D2794	100 in lb
Flexibility	ASTM D522	Pass 1/8"
Reverse Impact Resistance	ASTM D2794	40 in lb

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 #58
(0 ~ 25%, up to one quart per mixed gallon)

Airless Spray
PackingsTeflon
Tips0.019" through .023"
Fan angle.....65 through 80 degree
Nozzle pressure.....1200 psi / 80 bar

Conventional Spray

Pot pressure.....2.5-5.0 bar / 35-75 psi
Atomizing pressure1.5-2.5 bar / 20-35 psi
Air hose.....10 mm / 3/8" internal diameter
Material hose13 mm / 1/2" internal diameter

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



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RECOMMENDED SYSTEMS

		Dry Film Thickness / ct.	
		<u>Mils</u>	<u>(Microns)</u>
Steel/Atmospheric:			
1 ct.	Zinc Plate Ultra II PCP	0.5-1.2	(13-30)
Steel/Atmospheric:			
1 ct.	Zinc Plate Ultra II PCP	0.5-1.2	(13-30)
1 ct.	Macropoxy 646	5.0-10.0	(125-250)
NSF Systems			
Potable Water			
Steel/Immersion: Topcoat required			
1 ct.	Zinc Plate Ultra II PCP	0.5-1.2	(13-30)
Acceptable Topcoats		Min tank Size	
2 cts.	Tank Clad HS	200,000 gallons (756,000 L)	
2 cts.	SherPlate 600	200,000 gallons (756,000 L)	
2 cts.	Macropoxy 5500LT	200,000 gallons (756,000 L)	
1-2 cts.	Dura-Plate UHS	200,000 gallons (756,000 L)	
1-2 cts.	SherPlate PW Epoxy	200,000 gallons (756,000 L)	
1 ct.	SherFlex Elastomeric	200,000 gallons (756,000 L)	
Steel/Immersion:			
1 ct.	Zinc Plate Ultra II PCP	0.5-1.2	(13-30)
1-2 cts.	Macropoxy 646	5.0-10.0	(125-250)

Recommended topcoats for immersion service:

• Dura-Plate 235	• MIL-DTL-24441
• Dura-Plate 301	• MIL-PRF-23236
• Fast-Clad ER	• Seaguard 5000 HS
• Macropoxy 646	• TarGuard

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

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Reducer #58. Clean tools immediately after use with Reducer #58. 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.

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.

Zinc rich coatings require direct contact between the zinc pigment in the coating and the metal substrate for optimum performance.

Abrasive blasting to ISO-Sa 2.5, SSPC-SP10 is recommended.

Surface profile should be angular and jagged with a profile height of 1.5 - 3 mils (38 - 75 µm)

TINTING

Do not tint.

ORDERING INFORMATION

Packaging:

Part A (Binder):	12.04 L / 3.18 gal
Part B (Paste):	6.89 L / 1.82 gal

Weight: 11.09 ± 0.2 lbs/gal ; 1.33 Kg/L, mixed

MIXING INSTRUCTIONS

Mix contents of each component thoroughly using low speed power agitation. Make certain no pigment remains on the bottom of the can. **Then pour one unit of Part A into one unit of Part B.** Thoroughly agitate the mixture with low speed power agitation. Re-stir before using. Continuous agitation recommended during application.

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.**