

# Kem Kromik® Universal Metal Primer

B50NZ0006 Brown, B50WZ0001 Off White, B50AZ0006 Gray



**SHERWIN  
WILLIAMS®**

## CHARACTERISTICS

**KEM KROMIK UNIVERSAL METAL PRIMER** is a rust inhibiting, modified phenolic alkyd resin primer designed for use over iron and steel substrates. Can be used as a universal primer under high performance topcoats. Suitable as a barrier coat over conventional coatings which would normally be attacked by strong solvents in high performance coatings.

**For use on properly prepared:** Steel

### Features:

- High film build to protect sand blasted steel
- Corrosion resistant
- Universal, can be topcoated with epoxies and urethanes
- Exterior-interior metal primer
- Suitable for use in USDA inspected facilities

### Recommended for use in:

- Shopcoat primer
- Maintenance primer
- Structural steel
- Machinery
- Marine vessels
- Barrier coating
- Hand rail
- Storage tanks
- Bar joists
- Steel pipe

**Color:** Brown, Off White,  
Gray

**Recommended Spreading Rate per coat:**  
(B50NZ0006 varies by base)

Wet mils: 6.0-8.0

Dry mils: 3.2-4.2

Coverage sq. ft. per gallon: 202-265

**Theoretical coverage:** sq. ft. 850

per gallon @ 1 mil dry

Approximate spreading rates are calculated on volume solids and do not include any application loss. Note: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

### Drying Schedule @ 6.0 mils wet, @ 50% RH:

	@40°F	@77°F	@110°F
To touch :	2 hour	30 min.	15 min.
Tack handle:	2.5 hours	1 hour	20 min.
To recoat:	2.5 hours	1 hour	45 min.
with itself and alkyls			
To recoat:*	36 hours	16 hours	16 hours
To recoat:	48-72 hours	48-72 hours	48-72 hours
with acrylic latex paints			
Cure time	7 days	7 days	7 days

\* Recoat with hot solvent urethane or epoxies or high performance coatings.

Drying, and recoat times are temperature, humidity, and film thickness dependent.

**Tinting:** Do Not Tint

**Finish:** Flat

**Brown B50NZ0006**  
(may vary by color)

### V.O.C. (less exempt solvents):

408 grams per litre; 3.40 lbs. per gallon  
As per 40 CFR 59.406

**Volume Solids:** 53 ± 2%

**Weight Solids:** 73 ± 2%

**Weight per Gallon:** 12.70 lb

**Flash Point:** 80°F PMCC

**Shelf Life:** 36 months, unopened

## COMPLIANCE

As of 03/06/2020, Complies with:

<b>OTC</b>	No
<b>OTC Phase II</b>	No
<b>SCAQMD</b>	No
<b>CARB</b>	No
<b>CARB SCM 2007</b>	No
<b>Canada</b>	No
<b>LEED® v4 &amp; v4.1 Emissions</b>	No
<b>LEED® v4 &amp; v4.1 V.O.C.</b>	No
<b>EPD-NSF® Certified</b>	No
<b>MIR-Product Lens Certified</b>	No
<b>MP1®</b>	Yes

## APPLICATION

### Temperature:

minimum 40°F / 4.4°C  
maximum 120°F / 49°C  
air, surface, and material

At least 5°F above dew point

**Relative humidity:** 85% maximum

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 compatible with the existing environmental and application conditions.

**Reducer:** Not recommended  
Xylene,R2K4

### Airless Spray:

Pressure 1800-3000 p.s.i.  
Hose 1/4 inch I.D.  
Tip .015-.019 inch  
Filter 60 mesh

**Conventional Spray:** Binks 95

**Brush** Natural Bristle

**Roller Cover** 3/8 inch woven with solvent resistant core

If specific application equipment is listed above, equivalent equipment may be substituted.

Apply paint at the recommended film thickness and spreading rate as indicated on front page. Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance. 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, climatic conditions, and excessive film build.

Mix paint thoroughly to a uniform consistency with slow speed power agitation prior to use.

Stripe coat 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.

Not recommended for immersion service or exposure to acids, alkalis, or strong solvents.

Intimate contact with the steel surface and primer is necessary for adequate rust inhibition and adhesion.

For maximum adhesion, acrylic topcoats require 48 - 72 hours drying of primer.

## SPECIFICATIONS

### Steel:

1 coat Kem Kromik Universal Primer  
2 coats Topcoat

### Acceptable Topcoats:

Acrolon 218 HS Polyurethane  
Hi-Solids Polyurethane  
Industrial Enamel  
Macropoxy 646 Epoxy  
Macropoxy HS Epoxy  
Metalatex Semi-Gloss Enamel  
Pro Industrial Acrylic  
Pro Industrial Waterbased Epoxy  
Pro Industrial Waterbased Alkyd-Urethane  
Pro Industrial Multi-Surface Acrylic  
Pro Industrial Pre-Catalyzed Epoxy & Urethane  
Pro Industrial Urethane Alkyd Enamel  
Pro Industrial Waterbased Acrolon 100  
Sher-Cryl  
Silver-Brite Aluminum  
Steel Master 9500  
Tile-Clad HS Epoxy

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

# Kem Kromik®

## Universal Metal Primer

### SURFACE PREPARATION

**WARNING!** Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Existing peeled or checked paint should be scraped and sanded to a sound surface. Glossy surfaces should be sanded dull. Stains from water, smoke, ink, pencil, grease, etc. should be sealed with the appropriate primer/sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

**Iron & Steel-** Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6-NACE 3, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Prime any bare steel within 8 hours or before flash rusting occurs.

**Previously Painted Surfaces** - If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Retest surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Other substrates may or may not be appropriate. If a specific substrate is not listed above, consult your Sherwin-Williams representative for more information.

**As a "Barrier" Coat** - If it is necessary to topcoat a previously painted surface with chemically resistant or strong solvent topcoats, Kem Kromik Universal Metal Primer can be used as a barrier coat to help reduce lifting. Apply a coat of Kem Kromik Universal Metal Primer to a small area to test for adhesion or bleeding. If there is evidence of either poor adhesion or bleeding, clean surface to bare steel and apply recommended system.

**Ductile Iron Pipe Atmospheric Service:** Minimum surface preparation is power tool clean per National Association of Pipe Fabricators (NAPF) standards. First remove all oil and grease from surface by Solvent Cleaning per NAPF 500-03-01. Then power tool clean per NAPF 500-03-03. All existing coatings must be removed prior to priming. This includes but not limited to shop primers, asphaltic coatings or casting agents. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

**Ductile Iron Fittings Atmospheric Service:** Minimum surface preparation is abrasive blast cleaning per NAPF standards. First remove all oil and grease from surface by Solvent Cleaning per NAPF 500-03-01. Then abrasive blast cleaning per NAPF 500-03-05.

### SURFACE PREPARATION

**Mildew** - Prior to attempting to remove mildew, it is always recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised.

Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

### PERFORMANCE

Off White B50WZ0001

**System Tested:** (unless otherwise indicated)

**Substrate:** Steel

**Surface Preparation:** SSPC-SP6-NACE 3

**Primer:** 1 coat Kem Kromik @ 4.5-5 Mil W.F.T.

**Adhesion:**

Method: ASTM D3359

Result: 4B

**Corrosion Resistance:**

Method: ASTM D5894, 1008

Result: Pass

**Dry Heat Resistance**

Method: ASTM D2485

Result: 200°F

**Flexibility:**

Method: ASTM D522, 1/4 inch mandrel

Result: Pass

**Fineness of grind<sup>1</sup>:**

Method: Hegman

Result: 4 Hegman minimum

**Sag Test<sup>1</sup>:**

Method: ASTM D4400

Result: 12 mils minimum

**Viscosity<sup>1</sup>:**

Method: Krebs Units

Result: 84-94 KU

**Water Resistance:**

Result: Pass

<sup>1</sup> Standard test based on Certificate of Analysis

### SAFETY PRECAUTIONS

Before using, carefully read **CAUTIONS** on label. Refer to the Safety Data Sheets (SDSs) before use.

**FOR PROFESSIONAL USE ONLY.**

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

### CLEANUP INFORMATION

Clean spills, spatters & tools with compliant cleanup solvent. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

**DANGER:** Rags, steel wool, other waste soaked with this product, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with this product, and sanding residue in a sealed, water-filled, metal container. Dispose of in accordance with local fire regulations.

HOTW	03/06/2020	B50NZ0006	41 408
HOTW	03/06/2020	B50WZ0001	39 389
HOTW	03/06/2020	B50AZ0006	21 387