



# KEM KROMIK<sup>®</sup> UNIVERSAL METAL PRIMER

B50NZ0006 BROWN  
B50WZ0001 OFF WHITE  
B50AZ0006 GRAY

As of 01/16/2018, Complies with:			
OTC	No	LEED <sup>®</sup> 09 NC, CI	No
OTC Phase II	No	LEED <sup>®</sup> 09 CS	No
SCAQMD	No	LEED <sup>®</sup> 09 S	No
CARB	No	LEED <sup>®</sup> v4 Emissions	No
CARB SCM 2007	No	LEED <sup>®</sup> v4 VOC	No
Canada	No	MPI	Yes

## 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.

### 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

### For use on properly prepared:

- Steel

### Recommended for use in:

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

**Tinting:** **DO NOT TINT**

**Shelf Life:** 36 months, unopened

**Finish:** Flat

### White B50WZ0001

(may vary by base)

**VOC(less exempt solvents)** 389 g/L - 3.24 lb/gal  
(as per 40 CFR 59.406 and SOR/2009-264, s. 12)

**Volume Solids:** 55 ± 2%

**Weight Solids:** 75 ± 2%

**Weight per Gallon:** 12.86 lb/gal ± .2 lb

**Flash Point:** 80°F PMCC

### Brown B50NZ0006

(may vary by base)

**VOC(less exempt solvents)** 409 g/L - 3.24 lb/gal  
(as per 40 CFR 59.406 and SOR/2009-264, s. 12)

**Volume Solids:** 53 ± 2%

**Weight Solids:** 73 ± 2%

**Weight per Gallon:** 12.62 lb/gal ± .2 lb

**Flash Point:** 80°F PMCC

## SPECIFICATIONS

**Color:** White, Brown & Gray

**Recommended Spread Rate per coat:** White B50WZ0001 (varies by base)

wet mils: 6.0 – 8.0  
dry mils: 3.3 - 4.4  
coverage: 267- 200 sq ft/gal approximate

**Theoretical coverage:** 882 sq ft/gal @ 1 mil dry

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

	@ 40°F/4.5°C	@ 77°F/25°C	@ 110°F/43°C
To touch:	2 hours	30 minutes	15 minutes
Tack handle:	2.5 hours	1 hours	20 minutes
To recoat: with itself & alkyds	2.5 hours	1 hours	45 minutes
To recoat:*	36 hours	16 hours	16 hours
To cure:	7 days	7 days	7 days

\* Recoat with hot solvents or high performance coatings. For maximum adhesion, acrylic topcoats require 48 - 72 hours drying of primer. Drying and recoat times are temperature, humidity, and film thickness dependent.

## RECOMMENDED SYSTEMS

<b>Steel:</b>	Pro Industrial Waterbased Alkyd-Urethane
1ct. Kem Kromik Universal Primer	Pro Industrial Multi-Surface Acrylic
1-2 cts. Topcoat	Pro Industrial Pre-Catalyzed Epoxy & Urethane
<b>Acceptable Topcoats:</b>	Pro Industrial Urethane Alkyd Enamel
Acrolon 218 HS Polyurethane	Pro Industrial Waterbased Acrolon 100
Hi-Solids Polyurethane	Sher-Cryl
Industrial Enamel	Silver-Brite Aluminum
Macropoxy HS Epoxy	Steel Master 9500
Metalatex Semi-Gloss Enamel	Tile-Clad HS Epoxy
Pro Industrial Acrylic	
Pro Industrial DTM Acrylic	
Pro Industrial Waterbased Epoxy	

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

**System:** (unless otherwise indicated)

**Substrate:** Steel

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

**Primer:** 1ct. Kem Kromik Universal Metal Primer, @ 3.0 – 4.4 mils dft/ct.

### Adhesion<sup>1</sup>:

Method: ASTM D3359

Result: 4B

### Corrosion Resistance<sup>1</sup>:

Method: ASTM D5894, 1008

Result: Pass

### Dry Heat Resistance:

Method: ASTM D2485

Result: 200°F

### Flexibility<sup>1</sup>:

Method: ASTM D522,

1/4" mandrel

Result: Pass

### Fineness of grind<sup>2</sup>:

Method: Hegman

Result: 4 Hegman minimum

### Sag Test<sup>2</sup>:

Method: ASTM D4400

Result: 12 mils minimum

### Viscosity<sup>2</sup>: 84-94 KU

### Water Resistance<sup>1</sup>:

Result: Pass

<sup>1</sup> 1ct. Kem Kromik Primer 4.5-5 WFT<sup>2</sup> Standard test based on Certificate of Analysis



# 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.

**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.

## APPLICATION PROCEDURES

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.

## SAFETY PRECAUTIONS

Refer to the SDS sheets 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.

## PERFORMANCE TIPS

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.

## APPLICATION

Refer to the SDS sheet before use

**Temperature:** 40°F(4.5°C) minimum  
120°F(49°C) maximum  
(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  
**Clean Up**.....Xylene,R2K4

### **Airless Spray**

Pressure ..... 1800-3000 psi  
Hose .....1/4" ID  
Tip ..... .015-.019"  
Filter .....60 mesh

### **Conventional Spray**

Gun.....Binks 95  
Fluid Nozzle.....63C  
Air Nozzle.....63PB  
Atomization Pressure .....50 PSI  
Fluid Pressure .....15-20 PSI

**Brush**..... Natural Bristle

**Roll**.... 3/8" woven with solvent resistant core

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

## CLEANUP INFORMATION

Clean spills, splatters & 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	01/16/2018	B50NZ0006	38 409
HOTW	01/16/2018	B50WZ0001	39 389
HOTW	01/16/2018	B50AZ0006	20 386

SP