



**SHERWIN  
WILLIAMS.**

# Chemical Coatings

CC-A20

## KEM<sup>®</sup> 400 Primer

Gray ..... E61A400  
Red Oxide ..... E61R402

<u>DESCRIPTION</u>	<u>CHARACTERISTICS</u>	<u>SPECIFICATIONS</u>
<p><b>KEM<sup>®</sup> 400 Primer</b> is a fast drying primer offering corrosion protection under air dry alkyl enamels.</p> <p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>• Excellent enamel holdout for sharp gloss of the topcoat</li> <li>• Fast air drying time</li> <li>• Fast drying to recoat</li> <li>• Spray apply using conventional, airless, air assisted airless, or HVLP</li> <li>• Free of lead hazards as packaged in compliance with Consumer Product Safety Commission's (CPSC) 16 CFR Chapter II: Subchapter B, part 1303.</li> </ul>	<p><b>Gloss:</b> 60-80 units</p> <p><b>Volume Solids:</b> 25 ± 2% may vary by color</p> <p><b>Viscosity:</b> 18-35 seconds #3 Zahn Cup 45-85 seconds #4 Ford Cup</p> <p><b>Recommended film thickness:</b> Mils Wet 4.5 - 5.5 Mils Dry 1.0 - 1.25</p> <p><b>Spreading Rate</b> (no application loss) 295-433 sq ft/gal @ 1.0-1.25 mils DFT</p> <p><b>Drying</b> (1.0 mils dft, 77°F, 50% RH): To Touch: 30-60 minutes To Handle: 1-2 hours Tack Free: 2-3 hours To Recoat: before 3 hours or after 48 hours</p> <p>Force Dry: 20 minutes at 140-160°F</p> <p>Note: a critical recoat time may exist between 3 hours and 48 hours drying at room temperature. It may fluctuate depending on temperature, drying conditions, and film thickness. Test on a small area first.</p> <p><b>Flash Point:</b> 53°F Pensky-Martens Closed Cup</p> <p><b>Package Life:</b> 2 years, unopened</p> <p><b>Air Quality Data:</b> Photochemically reactive Volatile Organic Compounds (VOC) as packaged, maximum 5.13 lb/gal, 615 g/L Reduced 15% with Xylol: 5.32 lb/gal, 638 g/L</p> <p>An Environmental Data Sheet is available from your local Sherwin-Williams facility.</p>	<p><b>General:</b> Substrate should be free of grease, oil, dirt, fingerprints, drawing compounds, any contamination, and surface passivation treatments to ensure optimum adhesion and coating performance properties. Consult Metal Preparation Brochure CC-T1 for additional details.</p> <p><b>Aluminum:</b> If untreated, prime with Industrial Wash Primer, P60G2 or Kem Aqua Wash Primer, E61G520.</p> <p><b>Galvanized Steel:</b> If untreated, prime with Industrial Wash Primer, P60G2 or Kem Aqua Wash Primer, E61G520.</p> <p><b>Steel or Iron:</b> Remove rust, mill scale, and oxidation products. For best results, treat the surface with a proprietary surface chemical treatment of zinc or iron phosphate to improve corrosion protection.</p> <p><b>Testing:</b> Due to the wide variety of substrates, surface preparation methods, and application methods and environments, the customer should test the complete system for adhesion and compatibility prior to full scale application.</p>

## APPLICATION

### Typical Setups

**Reduction:** Reduce with Xylol, R2K4. For lower HAPS application use n-butyl acetate, R6K18 or MAK, R6K30. For wetter spray use High Flash Naptha, R2K5.

### Conventional Spray:

Air Pressure.....45-55 PSI  
Fluid Pressure.....10-15 PSI  
Tip......055-.070"  
Reducer .....Xylol, R2K4  
Reduction Rate ..... 10 - 15%  
or to 25 seconds on a #2 Zahn Cup

### Airless Spray:

Fluid Pressure.....1800-2400 PSI  
Tip ..... .011" - .017"  
Reducer .....Xylol, R2K4  
Reduction Rate ..... As needed

### Air Assisted Airless:

Assist Air.....10-20 PSI  
Fluid Pressure.....900-1800 PSI  
Tip......011-.017"  
Reducer.....Xylol, R2K4  
Reduction Rate.....As needed

### HVLP:

Max Pressure at cap.....10 PSI  
Fluid Pressure.....8-10 PSI  
Tip......055-.070"  
Reducer.....Xylol, R2K4

### Electrostatic Spray:

Reducer for polarity ..... MEK, R6K10  
Reduction Rate .....5%  
Reducer for flow .....Xylol, R2K4  
Reduction Rate ..... As needed

### Cleanup:

Clean tools/equipment immediately after use with Xylol or Toluol. For low HAPS clean up use n-butyl acetate or MAK. Follow manufacturer's safety recommendations when using any solvent.

### Performance Tests:

Substrate: Cleaned Steel Panels  
Primer: 1.25 mils DFT  
Salt Spray Test (ASTM B117)...100 hours

## SPECIFICATIONS

### Product Limitations:

- A minimum of 1.0 mils dry film thickness is required. Films of 1.25 - 1.50 mils offer optimum corrosion protection.
- This primer may exhibit lifting or have a critical recoat when topcoated with alkyds containing strong solvents (Aromatics and Ketones). Users should test for critical recoat or lifting in a small area before proceeding.
- Note: a critical recoat time may exist between 3 hours and 48 hours drying at room temperature. It may fluctuate depending on temperature, drying conditions, and film thickness. Test on a small area first.

## CAUTIONS

### FOR INDUSTRIAL SHOP APPLICATION

Thoroughly review product label for safety and cautions prior to using this product.

A Material Safety Data Sheet is available from your local Sherwin-Williams facility.

Please direct any questions or comments to your local Sherwin-Williams facility.

**Note:** Product data sheets are periodically updated to reflect new information relating to the product. It is important that the customer obtain the most recent Product data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in customer handling and methods of application which are not known or under our control, The Sherwin-Williams company cannot make any warranties as to the end result.