General Industrial Coatings

CC-A28

KEM-FLASH® Ultra-Bond® Primer

Black.....E61B707 Red Oxide E61R706
Gray.....E61A705 White .....E61W708 Custom Blend Series E61UX

DESCRIPTION

KEM-FLASH® Ultra-Bond® Primer is a high solids one-package epoxy ester primer offering excellent performance properties and a compatibility with a wide range of topcoats, including two component polyurethanes, alkyd enamels, and acrylic enamels. It is an ideal primer for construction machinery and farm equipment.

Advantages:

- As packaged, formulated to meet 3.38 lbs./gal. *VOC, less exempts
- Single component coating - no catalyst is needed
- Fast drying
- Excellent holdout of topcoat
- Excellent corrosion resistance
- High solids for quick film build with minimum spray passes
- May be applied using a wide array of application equipment
- Compatible with a wide range of topcoats, including:
  - Polane® Polyurethane Enamels
  - Kem® Fast Dry High Solids Enamel
  - Quick Dry® 350 Enamel
  - Kem Aqua® 8710 Enamel
  - Kem Acryl™ HS 100 Enamel
  - Kem Aqua 400 Enamel

*VOC Compliance limits vary from state to state; please consult local Air Quality rules and regulations.

An Environmental Data Sheet is available from your local Sherwin-Williams facility or at www.PaintDocs.Com.

CHARACTERISTICS

(may vary by color)

60° Gloss: < 30 units

Volume Solids: 53 ± 2%

Viscosity:
40-60 seconds, #4 Ford Cup
45-65 seconds, #2 Zahn Cup
Gardner Signature
18-30 seconds, #3 Zahn Cup
Gardner Signature

Recommended Film Thickness:
Mils Wet 1.9-2.8
Mils Dry 1.0-1.5
Excessive film build will cause loss of adhesion.

Spreading Rate (no application loss)**:**
555-857 ft.^{2}/gal. at 1.0-1.5 mils DFT

Drying: 77° F, 50% RH
To Touch 15-30 minutes
Tack Free 45-60 minutes
To Handle 60 minutes
To Topcoat 15 minutes

Package Life: 1 year, unopened

Flash Point: 60° F Seta Flash

Air Quality Data:
Photochemically Reactive
Volatile Organic Compounds (VOC)
as packaged, maximum: 3.38 lbs/gal, 407 g/L

SPECIFICATIONS

General: All substrates should be free of mold release, oil, grease, dirt, fingerprints, drawing compounds, surface passivation treatments and any other contaminants to ensure optimum adhesion and coating performance. Consult Metal Preparation brochure CC-T1 for additional details.

Aluminum: If untreated, prime with RoHS Compliant Wash Primer, P60G10 or Industrial Wash Primer, P60G2.

Galvanized Steel: If untreated, prime with RoHS Compliant Wash Primer, P60G10 or Industrial Wash Primer, P60G2.

Steel or Iron: 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. For hot rolled steel, sandblasting or power tool cleaning is recommended to remove mill scale, rust, etc.

Testing: The information, data, and recommendations set forth in this Product Data Sheet are based upon test results believed to be reliable. However, due to the wide variety of substrates, substrate properties, surface preparation methods, equipment and tools, application methods, and environments, the customer should test the complete system for adhesion, compatibility, and performance prior to full scale application.

continued on back

APPLICATION

Typical Setups

Reduction: For 3.5 lbs/gal VOC, reduce up to 3.5% maximum with R6K18 (Butyl Acetate) or R6K30 (MAK). Fluid temperatures up to 120° F may also be used for better application.

Conventional Spray:

Air Pressure	45-60 psi
Fluid Pressure	10-15 psi
Tip	0.055-0.070 in.

Airless Spray:

Fluid Pressure	2,200-2,600 psi
Tip	0.013-0.015 in.

Air Assisted Airless Spray:

Air Assist Pressure	10-30 psi
Fluid Pressure	2,000-2,600 psi
Tip	0.013-0.015 in.

Electrostatic Spray:

Reducer for polarity	MAK
Voltage	60-85 KV

HVLP Spray:

Air Pressure	Max 10 psi at cap
Fluid Pressure	8-10 psi

Cleanup:
Clean tools/equipment immediately after use with Xylene or High Flash Naphtha -100. For lower HAPS cleanup use R6K18 (Butyl Acetate) or R6K30 (MAK).

Performance Tests

Substrate: 24-gauge Bonderite® 1000 panels
1.5 mils DFT cured (air dried)
7 days before testing

Salt Spray Test (ASTM B117)	500 hours 1/8" scribe creepage, no face rust
Impact Resistance, Direct ASTM D2794	20 in lb
Impact Resistance, Indirect ASTM D2794	<5 in lb
Humidity (100° F, 100% RH) ASTM D2247	500 hours No blistering or face rust
Conical Mandrel, 1/8" ASTM-D522-92A	Pass

*Performance test results may vary depending on dry film thickness, substrate, tester and post-cure duration.

Follow manufacturer's safety recommendations when using any solvent.

ADDITIONAL INFORMATION

1. For good corrosion resistance, apply a minimum of 1.25 mils dry film thickness. 1.0-1.5 mils DFT is recommended for optimum corrosion resistance.
2. Higher film thicknesses may increase dry times and may cause critical recoat issues with some topcoats.
3. To maintain 3.5 VOC, do not reduce more than 3.5% with R6K18 or R6K30.
4. On blasted surfaces, apply sufficient dry film thicknesses to fully protect the blast profile. This is typically one mil more than the blast profile.
5. For topcoating after 4 weeks or more of air drying of the primer, sand for best adhesion.
6. Primer dry film thickness above the recommended range will result in raised gloss.
7. Force drying this product will not shorten cure time. The primer's cure and related performance is time dependent. However, a minimum cure temperature of 60° F is needed to achieve the listed performance properties in seven days.
8. For applications requiring a faster drying system that does not involve two component polyurethanes, Kem-Flash 500 Primer should be evaluated.

1. Compatible with Phoenix®, Opticolor® and GIS colorants. Do not add more than 2 ounces of colorant per gallon of base.

Note: Latex and nitrocellulose lacquers are not recommended over Kem-Flash Ultra-Bond Primer. Other enamels should be tested for performance before use.

CAUTIONS

FOR INDUSTRIAL SHOP APPLICATION ONLY

Thoroughly review the product label and Safety Data Sheet (SDS) for safety information and cautions prior to using this product.

To obtain the most current version of the Environmental Data Sheet (EDS), Product Data Sheet (PDS), or Safety Data Sheet (SDS) please visit your local Sherwin-Williams facility or www.PaintDocs.Com.

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

Note:
All purchases of products from Sherwin-Williams are exclusively subject to Sherwin-Williams' Standard Terms And Conditions Of Sale. Please review these terms and conditions prior to the purchase of the products.

Sherwin-Williams warrants the product to be free of manufacturing defect in accordance with Sherwin-Williams' quality control procedures. Except for the preceding sentence, due to factors that are outside of Sherwin-Williams' control, including substrate selection, and customer handling, preparation, and application, Sherwin-Williams cannot make any other warranties related to the product or the performance of the product. **SHERWIN-WILLIAMS DISCLAIMS ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.**

Liability for products proven to be defectively manufactured will be limited solely to replacement of the defective product or the refund of the purchase price paid for the defective product, as determined by Sherwin-Williams. Under no circumstances shall Sherwin-Williams be liable for indirect, special, incidental or consequential damages, lost profits or punitive damages arising from any cause whatsoever.