



**SHERWIN
WILLIAMS.**

Chemical Coatings

CC-A28

KEM-FLASH® Ultra-Bond® Primer

Gray E61A705
Red Oxide E61R706

Black E61B707
White E61W708

<u>DESCRIPTION</u>	<u>CHARACTERISTICS</u>	<u>SPECIFICATIONS</u>
<p>KEM-FLASH® Ultra-Bond® Primer, is a high solids low VOC* one-package epoxy ester primer offering excellent performance properties and topcoatability with a wide range of topcoats including two component polyurethanes, alkyd enamels, and acrylic enamels. It is an ideal primer for the construction machinery and farm equipment.</p> <p>Advantages:</p> <ul style="list-style-type: none"> • VOC of 3.37 lb/gal* • Single component - no catalyst • 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 • Free of lead and chromate hazards • Compatible with a wide range of topcoats, including: <ul style="list-style-type: none"> Polane Polyurethane Enamels Kem Fast Dry High Solids Enamel Quick Dry 350 Enamel Kem Aqua 280 Enamel Kem Acryl HS 100 Enamel Kem Aqua 400 Enamel <p>*VOC compliance limits vary from state to state; please consult local Air Quality rules and regulations.</p>	<p>Gloss: <30 units @ 60°</p> <p>Volume Solids: 53 ± 1% varies by color</p> <p>Viscosity: 40-60 seconds #4 Ford Cup 45-65 seconds #2 Zahn Cup (Gardner Signature) 18-30 seconds #3 Zahn Cup (Gardner Signature)</p> <p>Recommended film thickness: Mils Wet 2.8 - 3.8 Mils Dry 1.5 - 2.0</p> <p>Spreading Rate (no application loss) 417-577 sq ft/gal @ 1.5-2.0 mils DFT</p> <p>Drying (77°F, 50% RH): To Touch: 15-30 minutes To Handle: 60 minutes Tack Free: 45-60 minutes To Topcoat: after 15 minutes</p> <p>Flash Point: 60°F Seta Flash</p> <p>Package Life: 1 year, unopened</p> <p>Air Quality Data: Photochemically reactive Volatile Organic Compounds (VOC) as packaged, maximum 3.37 lb/gal, 405 g/L reduced 3.5%, maximum 3.5 lb/gal, 420 g/L</p> <p>An Environmental Data Sheet is available from your local Sherwin-Williams facility.</p>	<p>General: 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>Aluminum: If untreated, prime with Industrial Wash Primer, P60G2, then prime with Kem-Flash Ultra-Bond Primer.</p> <p>Galvanized Steel: If untreated, prime with Industrial Wash Primer, P60G2, then prime with Kem-Flash Ultra-Bond Primer.</p> <p>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.</p> <p>Testing: 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 Setup

Reduction: For 3.5 lb/gal VOC, reduce up to 3.5% maximum with Butyl Acetate or MAK for lower viscosity and easier application.

Fluid temperatures up to 120°F may also be used for better application.

Conventional Spray:

Air Pressure 40-60 psi
Fluid Pressure 10-15 psi
Cap 63PB (Binks), 765/797 (DeVilbiss)
Tip 66 (Binks), FF (DeVilbiss)

Airless Spray:

Pressure 2200-2600 psi
Tip013-.015"

Air Assisted Airless:

Air Pressure 10-30 psi
Fluid Pressure 2000-2600 psi
Cap/Tip ..222-608 (Graco)/.013 - .015"

Electrostatic Spray:

Reducer for polarity MAK
Voltage 60-85 KV

HVLP:

Air Pressure 50-65psi
Fluid Pressure 10-15 psi
Tip Pressure 8-9 psi

Cleanup:

Clean tools/equipment immediately after use with Xylene or Aromatic Naphtha-100 Flash.

Follow manufacturer's safety recommendations when using any solvent.

SPECIFICATIONS

Product Limitations:

- For good corrosion resistance, apply a minimum of 1.25 mils dry film thickness. 1.5-2.0 mil dft is recommended for optimum corrosion resistance.
- Higher film thicknesses may increase dry times and may cause critical re-coat with some topcoats.
- To maintain 3.5 VOC, do not reduce more than 3.5%.
- On blasted surfaces, apply sufficient dry film thicknesses to fully protect the blast profile. This is typically one mil more than the blast profile.
- For topcoating after 4 weeks or more of air drying of the primer, sand for best adhesion.
- Primer DFT above the recommended range will exceed the stated gloss.
- 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° is needed to achieve the listed performance properties in seven days.
- For applications requiring a faster drying system and do not involve two component polyurethanes, Kem-Flash 500 Primer should be evaluated.

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

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

Humidity

ASTM D2247, 100°F, 100% RH .. 500 hours
No blistering or face rust

Conical Mandrel

ASTM D522-92A passes 1/8" mandrel
Impact Resistance, Direct

ASTM D2794 20 in lb
Impact Resistance, Reverse

ASTM D2794 <5 in lb

CAUTIONS

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.

LABEL CAUTIONS

SEE CONTENTS STATEMENT ON LABEL.

Contents are **FLAMMABLE**. Vapors may cause flash fires. Keep away from heat, sparks, and open flame. During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition.

VAPOR HARMFUL. Use only with adequate ventilation. Wear an appropriate properly fitted vapor/particulate respirator (NIOSH approved) during and after application, unless air monitoring demonstrates vapor/mist levels are below applicable limits. Follow respirator manufacturer's directions for respirator use. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use.

Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage.

FIRST AID: If **INHALED:** If affected, remove from exposure. Restore breathing. Keep warm and quiet. If on **SKIN:** Wash affected area thoroughly with soap and water. Remove contaminated clothing. Launder before re-use. If in **EYES:** Flush eyes with large amounts of water for 15 minutes. Get medical attention. If **SWALLOWED:** Call Poison Control Center, hospital emergency room, or physician immediately.

SPILL AND WASTE: Remove all sources of ignition. Ventilate and remove with inert absorbent. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.

Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure.

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

FOR INDUSTRIAL USE ONLY.

SEE MATERIAL SAFETY DATA SHEET. 21574-051905.

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.