KEM BOND®
HS PRIMER

B50NZ0003 RED OXIDE
B50WZ0004 OFF WHITE
B50AZ0008 GRAY

KEM BOND HS is a fast drying, higher solids, rust inhibitive, universal, phenolic alkyd metal primer. Kem Bond HS can be topcoated with alkyd, acrylic, and high performance coatings. Also 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
- Good corrosion and rust protection
- 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:
- Marine application
- Steel pipe
- Structural steel
- Machinery

Tinting: DO NOT TINT

Shelf Life: 36 months, unopened

Finish: Flat

Off White B50WZ0004

VOC (less exempt solvent) 309 g/L - 2.58 lb/gal
(as per 40 CFR 59.406 and SOR/2009-264, s. 12)

Volume Solids: 63 ± 2%
Weight Solids: 81 ± 2%
Weight per Gallon: 13.73 lb/gal ± 2 lb
Flash Point: 99°F PMCC

Red Oxide B50NZ20003

VOC (less exempt solvent) 321 g/L - 2.68 lb/gal
(as per 40 CFR 59.406 and SOR/2009-264, s. 12)

Volume Solids: 61 ± 2%
Weight Solids: 80 ± 2%
Weight per Gallon: 13.35 lb/gal ± 2 lb
Flash Point: 97°F PMCC

SPECIFICATIONS

Color: Off White, Red Oxide & Gray

Recommended Spread Rate per coat: Off White B50WZ0004 (varies by base)
- wet mils: 3.0 – 8.0
- dry mils: 1.9 – 5.0

Theoretical coverage: 531 – 202 sq ft/gal approximate

Drying Schedule @ 4.0 mils wet, 50% RH:
- @ 40°F/4.5°C @ 77°F/25°C @ 120°F/49°C
  - To touch: 1 hour 30 minutes 10 minutes
  - Tack handle: 3 hours 1 hour 15 minutes
  - To recoat: with itself & alkyds 6 hours 2 hours 1 Hour
  - To recoat:* 24 hours 24 hours 6 hours
  - To recoat: with acrylic latex 48 hours 24 hours 6 hours
  - To cure: 5 days 2 days 1 days

*D recoat with hot solvent urethane or epoxies or high performance coatings

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

CHARACTERISTICS

Steel:
1ct. Kem Bond HS Metal Primer
1-2 cts. Topcoat

Acceptable Topcoats:
- Acrolon 218 HS Polyurethane
- Hi-Solids Polyurethane
- Industrial Enamel
- Macropoxy HS Epoxy
- Metaletax Semi-Gloss Enamel
- Pro Industrial Acrylic
- Pro Industrial DTM Acrylic
- Pro Industrial Waterbased Epoxy

System: (unless otherwise indicated)
Substrate: Steel
Surface Preparation: SSPC-SP6/NACE 3
Primer: 1ct. Kem Bond HS Metal Primer @ 3.0-5 mils dft/ct.

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 mandrel
- Result: Pass

Fineness of grind:
- Method: Hegman
- Result: 4 Hegman minimum

Sag Test:
- Method: ASTM D4400
- Result: 12 mils minimum

Viscosity:
- Result: 95-105 KU

Water Resistance:
- Result: Pass

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

RECOMMENDED SYSTEMS

1ct. Kem Bond Primer 4.5-5 WFT

1 continue on back
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.

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. According to AISC, shop coat primers are intended for protection for only a short period of exposure in ordinary atmospheric conditions, and is considered a temporary and provisional coating.

APPLICATION

Refer to the SDS sheet before use

Temperature: 40°F(4.5°C) minimum
120°F(49°C) maximum
(Air, surface, and material)
Relative humidity: At least 5°F above dew point

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/Clean Up Xylene,R2K4

Airless Spray Pressure: 1800 minimum psi
Hose: 1/4-3/8” ID
Tip: .017-.019”
Filter: 60 mesh
Reduction: As needed up to 5% by volume

Conventional Spray Not recommended

Brush Natural Bristle
Roll: 1/4-3/8” woven with solvent resistant core
Reduction: Not recommended

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

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Xylene, R2K4.

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.

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative or visit www.paintdocs.com to obtain the most current version of the PDS and/or an SDS.