SHERWIN WILLIAMS

General Industrial Coatings

KEM® Fast Dry High Solids Enamel

Low Gloss NACCO Black.... F85BL0001

DESCRIPTION

KEM® Fast Dry High Solids Enamel is a high quality high solids low VOC air drying alkyd enamel. It meets the general requirements of the construction machinery and farm equipment markets plus a wide range of general metal market applications.

Advantages:

- VOC as packaged is a maximum of 2.75 lb/gal less exempt solvents.
- Excellent one coat protection and performance.
- Low application viscosity at high volume solids
- Can be applied using existent application equipment – conventional, HVLP, airless, air assisted airless and electrostatic spray methods
- Good flexibility and film toughness
- High production output by reducing multiple pass operations

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

CHARACTERISTICS

Gloss: 15-20 units

Volume Solids: 40.0 ± 2%

Viscosity:
24-28 seconds #2 Zahn Cup

Recommended film thickness:

Mils Wet	2.5 – 3.3
Mils Dry	1.0 – 1.3

Spreading Rate (no application loss)
642 sq ft/gal @ 1.0-1.3 mils DFT

Drying (1.0-1.3 mils dft, 77°F, 50% RH):

To Touch:	15-60 minutes
To Handle:	60-120 minutes
Tack Free:	2 – 3 hours
To Recoat:	before 6 hrs or after 48 hours

Critical recoat period will fluctuate depending on drying conditions, fil thickness, etc. Test a small area first.

To Tape:	>24 hours

Force Dry (120-180°F)

To Handle:	20-60 minutes
To Tape:	20-60 minutes

Force dry is not recommended for low and intermediate gloss colors. See Product Limitations.

Flash Point: 2°F PMCC

Package Life: 1 year, unopened

Air Quality Data: (Theorectical)
Photochemically reactive
Volatile Organic Compounds (VOC)
as packaged, maximum
2.75 lb/gal, 404 g/L

An Environmental Data Sheet is available from your local Sherwin-Williams facility.

SPECIFICATIONS

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.

Aluminum: If untreated, prime with RoHS Compliant Wash Primer, P60G10 or Industrial Wash Primer, P60G2 or Kem Aqua® Wash Primer, E61G522. Over "pre-treated" aluminum, check adhesion before use as the proprietary pre- treatment may change from supplier to supplier which may have an effect on thefinal adhesion.

Galvanized Steel: Prime with RoHS Compliant Wash Primer, P60G10, or Industrial Wash Primer, P60G2 or Kem Aqua® Wash Primer, E61G522.

Steel or Iron: Surface must be properly cleaned and free of rust, grease, dirt, fingerprints and other contaminants. Treatment may consist of a proprietary surface chemical treatment, such as zinc or iron phosphate and/or the application of Kem Flash® 500 Primer (E61A750 series) or Kem Flash® Ultra-Bond™ Primer (E61A705 series) at 1.5 mil DFT. For best results on exterior exposure applications, a primer is recommended. See also Metal Preparation Brochure CC-T1.

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.

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APPLICATION

Typical Setups

Reduction: Kem® Fast Dry HS Enamel may be applied without reduction at 2.75 lb/gal VOC. Reduce 3.5% with MAK, R6K30, for lower viscosity and easier application.
For reductions keeping the VOC below 2.75 VOC lbs/gal, reduce with exempt solvents T-Butyl Acetate R6K38 or Acetone R6K9. **When using acetone, reduce only up to a maximum of 15% by volume and use the reduced Kem® Fast Dry HS Enamel only for a maximum of 2 weeks.**

For lower viscosity and easier application, coatings, may be heated up to 120°F using heated trace lines.

Conventional Spray:
Air Pressure.....50-60 psi
Reducer.....MAK R6K30
Reduction Rate.....as needed up to 3.5%
Airless Spray:
Pressure.....2000-2500 psi
Tip ..... .011-.015"
Air Assisted Airless:
Air Assist Pressure .....10-30 psi
Fluid Pressure .....800-2000 psi
Tip ..... .011-.015”
Electrostatic Spray:
Reducer for polarityMAK R6K30 as needed
HVLP:
Reducer.....MAK R6K30
Reduction Rate..... as needed up to 3.5%

Cleanup:
Clean tools/equipment immediately after use with MEK, R6K10 or MAK, R6K30.
For HAPS free cleanup use n-butyl acetate, R6K18.

Follow manufacturer's safety recommendations when using any solvent.

SPECIFICATIONS

Product Limitations:
- A critical recoat period may occur between 6 and 48 hours and will fluctuate, depending on drying conditions and film thickness. Test a small area first.
- Drying time is dependent on film thickness and atmospheric conditions. Heavier film thickness causes slow drying. Use of a primer will also slow drying.
- Not recommended for dip application.
- For improved corrosion resistance, use of a primer is recommended.
- Blocking or sticking will occur when flat surfaces are stacked before adequate cure.
- For very large machines requiring extended time to spray, adding 1-2% Butyl Carbitol will give a longer open time for overspray. Tack free time is longer.
- Parts should be air dried overnight befre outdoor exposure. Force dyring is acceptable for full gloss colors, however, force drying a low or intermediate color may result in a higher than expected gloss.
- Apply at temperatures above 60°F.
- Apply at least 1.25 mils dry film on DTM applications for good film integrity.
- The curing rate of this product is similar to traditional high solids air dry enamels. Caution should be taken for situations requiring fast handling and/or packing.
- Kem® Fast Dry HS Enamel low gloss products may not meet the exterior gloss retention requirements of the implement market specification for customer like Komatsu, Caterpillar and John Deere.
- The exterior gloss retention is proportional to the quantity of low gloss product used. The higher the quantity, the lower the gloss retention.

CAUTIONS

FOR INDUSTRIAL SHOP APPLICATION ONLY

Thoroughly review 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.

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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.

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