KEM ACRYL™ HS 100 Enamel

Gloss White F88W160
Gloss Black F88B161
Gloss Clear F88V162

DESCRIPTION

KEM ACRYL™ HS 100 Enamel is a good quality high solids low VOC air drying Acrylic Enamel. It has faster through dry than traditional high solids air dry enamels. The product line consists of a full Gloss White, Black and Clear. It can be shaded with 844 colorants to make custom colors. It meets the requirements of the general metals market.

Advantages:

- Early moisture resistance
- Low HAPS
- VOC of 3.37 lbs./gal.*
- Full Gloss products have very good color and gloss retention
- Good one-coat protection and performance
- Low application viscosity at high volume solids
- Can be reduced with exempt solvents such as acetone for better application at 3.37 lbs./gal. VOC
- Can be applied with existing 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 and faster through dry time
- Full color range capabilities
- Free of lead and chromate hazards

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

CHARACTERISTICS

Gloss: Full (85+ units)
Volume Solids: 50 - 53 ± 2%
may vary by color

Weight Solids: 57-70% ± 1%
Varies by color

Viscosity:
20-40 seconds #3 Zahn Cup (varies by color)

Recommended film thickness:
Mils Wet 2.0 - 3.0
Mils Dry 1.0 - 1.5

Spreading Rate (no reduction or application loss)
513-882 sq ft/gal @ 1.0 to 1.5 mils DFT

Drying (1.0 - 1.5 mils dft, 77°F, 50% RH):
To Touch: 15-30 minutes
To Handle: 1-2 hours
Tack Free: 60-90 minutes
To Recoat: Before 8 hours or after 24 hours
Critical recoat period will fluctuate depending on drying conditions, film thickness, etc. Test a small area first.
To Tape: > 24 hours
Force Dry: 10-30 minutes at 120-180°F

Flash Point: 32°F Pensky-Martens Closed Cup

Acrylic Urethane Mixing Ratio:
8 parts KEM ACRYL HS 100
1 part V66V29 Catalyst

Pot Life: 6 hours
Package Life: 12 months, unopened

Air Quality Data:
Photochemically reactive
Volatile Organic Compounds (VOC)
as packaged, maximum
3.37 lb/gal, 404 g/L
reduced 3.5% by volume with Hi Flash Naphtha 100:
3.5 lb/gal, 420 g/L
Hazardous Air Polutants (HAPS)
.28 lb/gal per gallon maximum
.53 lbs/gal per gallon of solids maximum
.06 lbs/lb per pound of solids maximum

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 Industrial Wash Primer, P60G2, or Kem Aqua® Wash Primer, E61G520. 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 the final adhesion.

Galvanized Steel: Prime with Industrial Wash Primer, P60G2, or Kem Aqua® Wash Primer, E61G520.

Steel or Iron: Surface must be properly cleaned and free of rust, mill scale, oxidation products, grease dirt, fingerprints and other contaminents. Treatment may consist of a proprietary surface chemical treatment, such as zinc or iron phosphate and/or the application of Kem Flash® 500 Primer or Kem Flash® Ultrabond Primer at 1.5 mils DFT. For best results on exterior exposure application, a primer is recommended. See Metal Preparation Brochure CC-T1 for additional details.

Testing: Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion and compatibility prior to full scale application.

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APPLICATION

Typical Setups

May be applied by:

Conventional Spray
Airless Spray
Air Assisted Airless
Electrostatic Spray
HVLP

Reduction: Kem Acryl HS 100 Enamel may be applied without reduction at 3.37 lbs./gal. VOC. For applications allowing 3.5 VOC, reduce with 100 Flash Naphtha, R2K5, for lower viscosity and easier application and smoothest appearance. This product can be reduced further with exempt solvents such as acetone to maintain 3.37 or 3.5 lbs./gal. VOC.

For very large machines requiring extended time to spray, adding .25-.5% DBE9 (R7K323) will give a longer open time for better overspray blend-in. Tack free time is longer.

Airless Spray:

Fluid Pressure ..... 2000-2500 psi
Tip ..... .011-.015"
Reducer ..... 100 Flash Naphtha, R2K5
Reduction Rate....as needed up to 3.5%

Air Assisted Airless:

Air Pressure ..... 10-45 psi
Fluid Pressure ..... 600-1500 psi
Cap/Tip ..... .011-.015"
Reducer .....Hi Flash Naphtha 100, R2K5
Reduction Rate....as needed up to 3.5%

Cleanup:

Clean tools/equipment immediately after use with Hi Flash Naphtha 100 (R2K5), MAK (R6K30) or acetone (R6K9).

Flush equipment with solvent to prevent rusting.

Follow manufacturer's safety recommendations when using any solvent.

SPECIFICATIONS

Product Limitations:

- A critical recoat period may occur between 8 and 24 hours and will fluctuate, depending on drying conditions and film thickness. Test a small area first.
- Drying time is dependent of film thickness and atmospheric conditions. Heavier film thickness causes slow drying. Use of a primer will also slow drying.
- Not recommended for dip application.
- Iron or zinc phosphate pre-treatment or equilavent and primer is recommended for improved corrosion protection and film integrity on exterior applications.
- Blocking or sticking will occur when flat surfaces are stacked before adequate cure.
- Clear F88V162 is intended for color blending only and is not intended for use as a clear coating.
- Parts should be dried for a minimum of 2 hours before outdoor exposure. Force drying is acceptable for full gloss colors.
- Apply at a temperature above 60°F.
- Apply at least 1.0 mils DFT on DTM applications for good film integrity.
- The through cure rate of this product is faster than traditional high solids air dry coatings. Caution should be taken for situations requiring fast handling and/or packing.

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. 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.
Contains Styrene which may cause cancer based on animal data.
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. 24387-100903.

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.