



# General Industrial Coatings

CC-B31

## KEM ACRYL™ HS 100 Enamel

Gloss Black .....	F88B161	Catalyst (optional).....	V66V29
Gloss Clear.....	F88V162	Custom Blend Series .....	F88KX
Gloss White .....	F88W160		

### DESCRIPTION

**KEM ACRYL™ HS 100 Enamel** is a good quality high solids air drying Acrylic Enamel. It has faster through dry than traditional high solids air dry enamels. The product line consists of high loss white, black and clear bases. It can be shaded with GIS, Opticolor® Express & Phoenix® colorants to make custom colors. It meets the requirements of the general metals market.

#### Advantages:

- Early moisture resistance
- High production output by reducing multiple pass operations and faster through dry time
- VOC\* as packaged maximum 3.37 lbs/gal less exempt solvents
- High 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

#### KEM ACRYL HS 100 Enamel Urethane

For increased chemical and abrasion resistance and color and gloss retention, KEM ACRYL HS 100 Enamel may be catalyzed with Polane® Exterior Catalyst (V66V29) at an 8:1 ratio prior to reduction. Initial dry times will be slower, overnight hardness is better. Working potlife after catalyzation is 6 hours. No critical recoat when catalyzed.

\*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](http://www.PaintDocs.Com).

### CHARACTERISTICS

(may vary by color)

<b>60° Gloss:</b>	85+ units
<b>Volume Solids:</b>	50-53 ± 2 %
<b>Weight Solids:</b>	57-70 ± 1 %
<b>Viscosity:</b>	20-40 secs., #3 Zahn Cup
<b>Recommended Film Thickness:</b>	
Mils Wet	2.0-3.0
Mils Dry	1.0-1.5
<b>Spreading Rate</b> (no reduction or application loss):	515-880 ft. <sup>2</sup> /gal. at 1.0-1.5 mils DFT
<b>Cure:</b>	
Air Dry or	
Force Dry	10-30 mins at 120-180° F
<b>Substrate Disclaimer:</b>	Curing of coating at temperatures higher than the heat distortion parameters of the substrate may cause substrate issues.
<b>Drying:</b>	1.0-1.5 mils DFT at 77° F, 50% RH
To Touch	15-30 minutes
Tack Free	60-90 minutes
To Handle	1-2 hours
To Recoat	Before 8 hours or after 24 hours
	The critical recoat period will fluctuate depending on drying conditions, film thickness, etc. Test a small area first.
To Tape	> 24 hours
<b>Flash Point:</b>	32° F
Pensky Martens Closed Cup	
<b>Acrylic Urethane Mixing Ratio:</b>	
Bases	8 Parts
V66V29 Catalyst	1 Part
<b>Potlife:</b>	6 hours
<b>Package Life:</b>	
Bases	12 months, unopened
V66V29	24 months, unopened

#### Air Quality Data:

Photochemically reactive
Volatile Organic Compounds (VOC)**
As packaged, maximum, less exempt solvents
3.37 lbs/gal, 404 g/L
Reduced 3.5% (vol.) with Hi Flash Naphtha 100
3.5 lbs/gal, 420 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 or Kem Aqua® Wash Primer, E61G522. Over "pre-treated" aluminum, check adhesion before use as the proprietary pretreatment may change from supplier to supplier which may have an effect on the final 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, mill scale, oxidation products, 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 mils DFT. For best results on exterior exposure application, a primer is recommended. See Metal Preparation Brochure CC-T1 for additional details.

**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.

## APPLICATION

### Typical Setups

**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, 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 0.25-0.50% R7K323 (DBE-9) will give a longer open time for better overspray blend-in. This will increase the tack free time.

**May be applied by:** Conventional  
Airless  
Air Assisted Airless  
HVLP

**Conventional Spray:**  
Air Pressure 50-60 psi  
Fluid Pressure 10-12 psi  
Tip 0.055-0.070 in.

**Airless Spray:**  
Fluid Pressure 2,000-2,500 psi  
Tip 0.011-0.015 in.  
Reducer R2K5 (100 Flash Naphtha)  
Reduction Rate As needed up to 3.5%

**Air Assisted Airless Spray:**  
Air Assist Pressure 10-45 psi  
Fluid Pressure 600-1,500 psi  
Tip 0.011-0.015 in.  
Reducer R2K5 (100 Flash Naphtha)  
Reduction Rate As needed up to 3.5%

**HVLP Spray:**  
Air Pressure Max 10 psi at cap  
Fluid Pressure 6-8 psi  
Tip 0.055-0.070 in.

Equipment/application guidelines are only guidelines and individual application & process parameters will dictate exact requirements.

**Cleanup:** Clean tools and equipment immediately after use with R2K5 (100 Flash Naphtha), R6K30 (MAK) or R6K9 (acetone).

Flush equipment with solvent to prevent rusting.

Follow manufacturer's safety recommendations when using any solvent.

## ADDITIONAL INFORMATION

1. 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.
2. Drying time is dependent of film thickness and atmospheric conditions. Heavier film thickness causes slow drying. Use of a primer will also slow drying.
3. Not recommended for dip application.
4. Iron or zinc phosphate pre-treatment or equivalent and primer is recommended for improved corrosion protection and film integrity on exterior applications.
5. Blocking or sticking will occur when flat surfaces are stacked before adequate cure.
6. Clear F88V162 is intended for color blending only and is not intended for use as a clear coating.
7. Parts should be dried for a minimum of 2 hours before outdoor exposure. Force drying is acceptable for full gloss colors.
8. Apply at a temperature above 60° F.
9. Apply at least 1.0 mils DFT on DTM applications for good film integrity.
10. 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.
11. Do not add more than 20 ounces of Opticolor Express or GIS colorant per gallon of base.

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## 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](http://www.PaintDocs.Com).

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

#### **Note:**

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