



# TECHNICAL INFORMATION

KEM® 400 ENAMEL  
F75Y499  
CATERPILLAR YELLOW

CHEMICAL  
COATINGS

## PRODUCT DESCRIPTION

**Kem® 400 Enamel, F75Y499**, is a high gloss coating based on short oil alkyd. It is ideal for interior and exterior applications for OEM finishing or refinishing of industrial, construction, and farm equipment, as well as a wide variety of general metal applications.

### **Kem® 400 Acrylic Enamel -**

For improved exterior color and gloss retention, faster drying, sharper gloss and improved block resistance in stacking, a 10% addition of acrylic modifier, V70V411, may be added to Kem® 400 Enamel.

### **Kem® 400 Urethane Enamel -**

For increased chemical and abrasion resistance, improved hardness, sharper gloss and better gloss and color retention, Kem® enamel may be catalyzed at an 8:1 ratio with Kem®400 exterior catalyst, V66V1020, prior to reduction. Drying times are slightly faster. Addition of catalyst eliminates the critical recoat time. Working potlife is 8 hours maximum at room temperature. Catalyst contains isocyanates. Read label cautions on V66V1020 before use.

### **Advantages:**

1. Good exterior color and gloss retention.
2. Good one coat protection.
3. Fast air drying.
4. Good flexibility and film toughness.
5. Apply by conventional, airless, air assisted airless, dip and HVLP spray methods.
6. Ideal for large components because of longer open time and wet in of over spray.
7. Ideal system for miscellaneous metal finishing.
8. Lead/chromate hazard free.

## CHARACTERISTICS

<b>Gloss:</b>	85+at 60°
<b>Weight/Gallon:</b>	8:45 ± .1 lbs./gal.
<b>Volume Solids:</b>	29.8 ± 2%
<b>Viscosity:</b>	Zahn #3, 25-35 secs. #4 Ford, 40-50 secs.
<b>Spreading Rate:</b>	478 sq.ft./gal. at 1.0 mil dry film; no application loss

## CHARACTERISTICS - continued

<b>Package Life:</b>	2 years, unopened
<b>Drying:</b>	air dry at 77, 50% RH
To touch	½ - 1 hour
Tack free	2 - 3 hours
To recoat before 3 hours & after 48 hours. A critical recoat time may exist between 3 and 48 hours. Drying at room temperature. It may fluctuate depending on temperature, drying conditions, and film thickness. Test on small area first.	
Force Dry:	20 minutes at 140-160°F

<b>Flash Point:</b>	68°F Pinsky-Martens, closed cup
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### **Air Quality Data:**

Photochemically reactive. Volatile Organic Compounds (VOC), as packaged  
4.9 lbs./gal. (592 g/l) maximum

## APPLICATION

### **Recommended Film Thickness:**

Wet -	4.0 - 5.0 mils
Dry -	1.2 - 1.5 mils

### **Clean Up:**

Use Xylol or other aromatic solvents following supplier's recommendations.

## SPECIFICATIONS

### **Surface Preparation:**

**Metal** - Substrate must be free of dirt, grease, fingerprints, rust and other contaminants to insure good adhesion and coating performance properties. A surface chemical treatment (iron or zinc phosphate) gives better performance than untreated metal. Refer to Metal Preparation Brochure CC-T1.

**Iron or Steel** - For improved corrosion protection, priming is recommended.

Prime with Kem® 400 Primer, E61A400/E61R402, Acrylic Enamel Primer, E61A60/E61R62, UltraBond® Primer, E61A705, E61B707, E61W708, E61R706. Refer to Product Data Sheet for recommendations.

**Aluminum and Galvanized Steel (Untreated)** - Prime with Industrial Wash Primer, P60G2.

## SPECIFICATIONS - continued

**Kem® 400 Enamel** may be applied by conventional, airless, air assisted airless or HVLP spray equipment and dipping. Reduce 5-15% with Xylol, R2K4, if necessary - depending on application equipment. For more flow and open time, use Aromatic Naphtha-100 Flash, R2K5, or aromatic Naphtha-150 Flash, R2K7. Use Toluol for faster flash-off and color temperatures.

### **Product Limitations:**

1. For improved corrosion resistance, priming is recommended.
2. Refer to critical recoat under "drying" under Characteristics.
3. Blocking or sticking may occur when flat surfaces are stacked before adequate cure.
4. Apply at temperatures above 60°F.
5. Higher or lower than recommended film thickness will affect final gloss.
6. Adhesion to recommended film thickness for best results. High film build may increase dry time.

## CAUTIONS

Contents are **FLAMMABLE**. VAPORS MAY CAUSE FLASH FIRES. Keep away from heat, sparks, and open flame. During sue and until all vapors are gone, keep area ventilated. Do not smoke. Extinguish all flames, pilot lights, and heaters. Turn off all stoves, electric tools and appliances, and any other sources of ignition.

**CONTAINS ALIPHATIC and AROMATIC HYDROCARBONS, and XYLOL.**

**VAPOR HARMFUL.** Use only with adequate ventilation. Wear an appropriate, properly fitted vapor/particulate respirator (NIOSH/MSHA approved) during and after application unless air monitoring demonstrates vapor mist levels are below applicable levels. Follow respirator manufacturer's direction 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.

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**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 regulations regarding pollution.

Delayed effects from long term over-exposure...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.

**DO NOT TAKE INTERNALLY**

**KEEP OUT OF REACH OF CHILDREN**

**FOR INDUSTRIAL USE ONLY**

**SEE MATERIAL SAFETY DATA SHEET**

**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 above 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 or guarantees as to the end results.

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