Chemical Coatings

CC-B26

KEM® 400 Enamel

Gloss Black	F75B401	Flat Black	F75B412
High Hide White	F75W404	Silver Metallic	F75S491
Blending Clear	F75V405	Metallic Mixing Clear	F75V412
Acrylic Modifier	V70V411	Kem 400 Catalyst	V66V1020

DESCRIPTION

KEM® 400 Enamel is a general purpose, short oil alkyd, high gloss enamel. It is ideal for interior and exterior application for OEM finishing or refinishing of industrial, construction, and agricultural equipment as well as a wide array 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® 400 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:
- High Gloss
- Good exterior color and gloss retention
- Good one coat protection
- Fast air drying
- Good flexibility and film toughness
- Full range of custom colors through Phoenix blending system
- Apply by conventional, airless, air assisted airless, or HVLP spray methods
- Ideal for large components because of longer open time and wet-in of overspray
- Free of lead and chromate hazards
- Ideal system for horse trailers, farm, garden, and construction equipment and industrial machinery and equipment

CHARACTERISTICS

Gloss: 85+ units
Volume Solids: 28-32 ± 2%
may vary by color
Viscosity:
50-60 seconds #2 Zahn Cup
40-50 seconds #4 Ford Cup
Recommended film thickness:
Mils Wet 3.5 - 5.0
Mils Dry 1.0 - 1.5
Spreading Rate (no application loss)
300-515 sq ft/gal @ 1.0-1.5 mil dft:
Drying (77°F, 50% RH):
To Touch: 15-30 minutes
To Handle: 30-60 minutes
Tack Free: 2-3 hours
To Recoat: before 3 hours and after 48 hours
Force Dry: 20 minutes at 140-160°F

A critical recoat time may occur between 3 and 48 hours at room temperature. This may fluctuate depending on temperature, film thickness, and drying conditions. Test a small area first.

Flash Point: 68°F Pensky-Martens Closed Cup
Package Life: 2 years, unopened
V66V1020 23 months, unopened

Air Quality Data:
Photochemically Reactive
Volatile Organic Compounds (VOC)
as packaged, maximum
4.96 lb/gal, 595 g/L
reduced 15% with Xylene:
5.25 lb/gal, 630 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 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.

Steel or Iron: Remove rust, mill scale, and oxidation products. For best results, treat the surface with a proprietary surface chemical treatment of zinc or iron phosphate to improve corrosion protection.
For improved corrosion protection, priming is recommended. Prime with Kem® 400 Primer or Kem-Flash® Ultra-Bond™ Primer.

Testing: Due to the wide variety of substrates, surface preparation methods, and 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 Setup

Reduction: Reduce with Xylol as needed up to 15%. For more flow and open time, use Aromatic Naphtha 100 Flash or Aromatic Naphtha 150 Flash. Use Toluol for faster flash off and in cooler temperature.

May be applied using:

Conventional Spray:
Airless Spray
Air Assisted Airless
HVLP
Dip

Cleanup:

Clean tools/equipment immediately after use with Aromatic Naphtha or Acetone. Xylol, R2K4 may be used but is not HAPS compliant.

Follow manufacturer's safety recommendations when using any solvent.

SPECIFICATIONS

Product Limitations:

- For improved corrosion resistance, priming is recommended.
- Blocking or sticking may occur when flat surfaces are stacked before adequate cure.
- Apply at temperatures above 60°F.
- Apply at least 1.25 mils dry film thickness on direct to metal applications for good film integrity.

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.

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. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). 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.

Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure.

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.

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. 25666-120205.