



**SHERWIN
WILLIAMS.**

Chemical Coatings

CC-E12

KEM AQUA® 600 Smooth Water Reducible Enamel

Black F73B530
 Clear F73V531
 White F73W532

<u>DESCRIPTION</u>	<u>CHARACTERISTICS</u>	<u>SPECIFICATIONS</u>
<p>KEM AQUA® 600 Smooth Water Reducible Enamel is a one component, low gloss, 2.3 lb/gal VOC complying, acrylic latex, water reducible coating developed for the electronic business machine market. This product can be used as a smooth coating on treated metal, structural foam plastic, and wood substrates to obtain very smooth, non-orange peel surfaces.</p> <p>Advantages:</p> <ul style="list-style-type: none"> • VOC of less than 2.3 lb/gal • Meets the performance requirements of the electronic cabinetry industry • Air dry or force dry — low energy cure • Excellent solvent resistance • Excellent smoothness - no orange peel • One package — no catalyst • Reduce and clean up with water - means cost savings for solvent and insurance, reduced fire hazards, lower odors and improved working conditions • Apply with conventional, airless, air assisted airless, or HVLP spray methods • Available in a broad range of colors • Ideal for a wide range of product finishing • No flash point • Low HAPS content • Free of lead hazards as packaged in compliance with Consumer Product Safety Commission's (CPSC) 16CFR Chapter II: Subchapter B, part 1303 	<p>Gloss: 25-35 units Clear is higher</p> <p>Volume Solids: 36-40 ± 1% varies by color</p> <p>Viscosity: 61-67 Krebs Units</p> <p>Recommended film thickness: Mils Wet 4.0 - 5.5 Mils Dry 1.5 - 2.0</p> <p>Spreading Rate (no application loss) 297-439 sq ft/gal @ 1.5-2.0 mil DFT</p> <p>Drying (1.0 mils dft, 77°F, 50% RH): To Touch: 5-15 minutes Tack Free: 15-20 minutes To Handle: 30-45 minutes To Pack: overnight Force Dry: 30 minutes at 140°F</p> <p>Good air movement and humidity control is necessary for proper drying of water reducible coatings.</p> <p>Flash Point: None, Seta Flash Closed Cup</p> <p>Package Life: 1 year unopened, inside storage</p> <p>pH: 8.0 - 8.5</p> <p>Air Quality Data: (Theoretical) Non-photochemically reactive Volatile Organic Compounds (VOC) as packaged, maximum, less exempt solvents 1.89 lb/gal, 226 g/L</p> <p>Volatile Organic Emissions as packaged, maximum .99 lb/gal, 118 g/L</p> <p>An Environmental Data Sheet is available from your local Sherwin-Williams facility.</p>	<p>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.</p> <p>Aluminum: Prime with Kem Aqua Wash Primer E61G520.</p> <p>Galvanized Steel: Prime with Kem Aqua Wash Primer E61G520.</p> <p>Plastic: Due to the diverse nature of plastic substrates, a coating or coating system must be tested for acceptable adhesion to the substrate prior to use in production. Reground and recycled plastics along with various fire retardants, flowing agents, mold release agents, and foaming/blowing agents will affect coating adhesion. If needed, prime with Kem Aqua Bonding Primer E61W525 or Polane W₂ Primer E61AC514. If filling is required use Kem Aqua 65P SprayFil. Please consult your Sherwin-Williams Chemical Coatings Sales Representative for system recommendations.</p> <p>Steel: 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. If needed, prime with Polane W₂ Primer E61AC514. If filling is required use Kem Aqua 65P SprayFil.</p> <p>Wood (interior only): Must be clean, dry, and finish sanded. Substrate should be free of grease, oil, dirt, fingerprints, and any contamination to ensure optimum adhesion and coating performance properties. Prime with Kem Aqua 65P SprayFil, Sher-Wood 2400 Millwork Primer E60W501, or Polane W₂ Primer E61AC514.</p> <p>Testing: Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion, compatibility and performance prior to full scale application.</p>

APPLICATION

Typical Setups

May require two coats. Spray a full wet coat and allow to flash off 10 minutes before applying the second coat

Reduction: Reduce with water as needed up to 10%.

Conventional Spray

Air Pressure45-60 psi
Fluid Pressure 15-20 psi
Tip Size040 - .070"

HVLP

Air Pressure 8-10 psi
Fluid Pressure 10-15 psi
Tip Size040 - .070"

Air Assisted Airless

Fluid Pressure 600-800 psi
Air Assist Pressure 5-15 psi
Tip009 - .013"

Airless

Fluid Pressure 1600-2300 psi
Tip011 - .013"

Cleanup:

This product dries hard and adheres tightly to tanks and equipment. Cleanup may be very difficult once material is fully dry. For best results, wash with water while coating is still wet. If the product has begun to dry, use a blend of 4 parts water, 1 part Butyl Cellosolve, and 1-2% household ammonia to clean up equipment and tanks.

Use protective safety apparel (rubber gloves, chemical mask, and safety glasses) when handling this solution. Follow manufacturer's safety recommendations when using any solvent.

SPECIFICATIONS

Product Limitations:

- Avoid freezing. Store at temperatures of 50°F to 100°F.
- Keep container closed to prevent skinning of this fast dry coating. Filtering may be required.
- Product is thixotropic. Do not use viscosity cup to measure viscosity. Do not reduce over 10%.
- A minimum of 1.1 mils dry film per coat is required for good adhesion and film integrity.
- Do not apply with electrostatic bell or turbodisk.
- Not intended for long term exterior applications.
- The practical upper limit for gloss is 40-45 units. This range will require up to a 1:1 addition of F73V531. Kem Aqua 600 is not a high gloss coating.
- Kem Aqua Colorants not to exceed 8 ounces per gallon.
- Gloss levels may be adjusted by using D64F505 Kem Aqua Flattening Base. Refer to data sheet CC-S13 for details.

Performance Tests

24 gauge Bonderite 1000 steel panels and 1.5 mils dft, 14 days air drying
Salt Spray Test
ASTM B117 48-72 hours
Humidity
ASTM D2247, 100°F, 100% RH ... 100 hours
Pencil Hardness HB
Taber Abrasion
CS 17 wheel, 1000 g, 1000 cycles ... <100 mg
Freeze Thaw Stability 2 cycles

Chemical Resistance

After ½ hour spot test and 1 hour recovery
Isopropanol Excellent
10% NaOH Excellent
Ethyl Acetate Good
Ammonia Excellent
Ivory Liquid Excellent
Clorox Formula 409 Excellent
MEK Good
Toluene Good
10% HCl Excellent
1 normal H₂SO₄ Excellent
5% Tide solution Excellent
MEK Resistance 50 double rubs Passes

Stain Resistance

After ½ hour spot test
Coffee Excellent
Vaseline Excellent
Coca Cola Excellent
Catsup Excellent
Motor Oil Excellent
Gasoline Excellent
Lipstick Excellent

CAUTIONS

FOR INDUSTRIAL SHOP APPLICATION

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.

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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10% NaOH Excellent
Ethyl Acetate Good
Ammonia Excellent
Ivory Liquid Excellent
Clorox Formula 409 Excellent
MEK Good
Toluene Good
10% HCl Excellent
1 normal H₂SO₄ Excellent
5% Tide solution Excellent
MEK Resistance 50 double rubs Passes

Stain Resistance

After ½ hour spot test
Coffee Excellent
Vaseline Excellent
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Catsup Excellent
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