General Industrial Coatings

CC-E6

KEM AQUA® 600T Water Reducible Enamel

Black.....F73B560 Clear.....F73V561
White .....F73W562 Custom Blend.....F73WX Series

DESCRIPTION

KEM AQUA® 600T Water Reducible Enamel is a one component, acrylic latex, water reducible coating developed for the electronic business machine market. This product can be used as a smooth or texture coating on treated metal and structural foam plastics.

Advantages:

- Meets the performance requirements of the electronic cabinetry industry
- Air dry or force dry - low energy cure
- Excellent solvent resistance
- One package - no catalyst
- Wide range of texture patterns available
- Reduce and cleanup with water** means possible cost savings for solvent and insurance, reduced fire hazards, lower odors, and improved working conditions
- Available in a broad range of colors
- Ideal for a wide range of product finishing
- No flash point
- Complies with 2.3 *VOC solvent emissions

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

** To ensure optimal coating performance and stability, it is recommended to use deionized water for reduction.

An Environmental Data Sheet is available from your local Sherwin-Williams facility or at www.PaintDocs.Com.

CHARACTERISTICS

60° Gloss: 30-35
May be adjusted with D64F505

Volume Solids: 36-40 ± 1% (varies by color)

Viscosity: 5000-6000 cps
(Brookfield RVT, #4 spindle, 20 rpm)
Thixotropy ratio @ 10/100 rpm 4.5-5.5

Paint should be mechanically mixed; a paint shaker is not adequate agitation.

Recommended Film Thickness:

Mils Wet	3.0-4.0
Mils Dry	1.2-1.6

Spreading Rate (no application loss)**:**
370-520 ft.^{2}/gal. at 1.2-1.6 mils DFT

Drying: 1.0 mil at 77° F, 50% RH

To Touch	7-15 minutes
Tack Free	15-20 minutes
To Handle	30-45 minutes
To Pack	Overnight
Force Dry	30 mins. @ 140° F

10-15 minutes flash off between smooth and texture coats. Good air movement and humidity control is necessary for proper drying of water reducible coatings.

Flash Point: None
Seta Flash Closed Cup

Package Life:

F73B560, F73V561	12 months, unopened
F73W562	6 months, unopened

pH: 8.0-8.5

Air Quality Data:
Non-photochemically Reactive
Volatile Organic Compounds (VOC)
As packaged, less water and exempt solvents <2.3 lbs/gal, 275 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: Prime with Industrial Wash Primer, P60G2 or Kem Aqua Wash Primer, E61G522.

Galvanized Steel: Prime with Industrial Wash Primer, P60G2 or Kem Aqua Wash Primer, E61G522.

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. If a primer is needed, use Polane® W2 Primer, E61A516.

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 a primer is needed, test Kem Aqua Bonding Primer E61W525, Polane W2 Primer E61A516, or Kem Aqua 65P SprayFil. Please consult your Sherwin-Williams Sales Representative for system recommendations.

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, SherWood® 2400 Millwork Primer E60W501, or Polane W2 Primer E61A516.

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.

continued on back

Application

Typical Setups

Water Reducible coatings should be applied at high viscosity. They atomize very easily at higher viscosity.

A texture finish is produced by a two-coat application.

Paint should be mixed mechanically with a mixing blade for 5 minutes before used. A paint shaker is not adequate agitation.

Reduction: To ensure optimal coating performance and stability, it is recommended to use deionized water for reduction.

Base Coat: Spray full body. If needed, reduce up to 5% with water. Apply a full wet coat and allow to flash off for a mini- mum of 10 minutes.

May be applied by:	Conventional HVLP

Conventional Spray: Smooth Coat

Air Pressure	40-60 psi
Fluid Pressure	10-12 psi
Tip	0.055-0.070 in.

Conventional Spray: Texture Coat

Spray full body. If needed, reduce up to 5% with water. Spray the texture coat using a pressure pot with these equipment/settings:

Air Pressure	10-20 psi
Fluid Pressure	5-12 psi
Tip	0.055-0.070 in.

HVLP Spray: Smooth Coat

Air Pressure	8-10 psi
Fluid Pressure	6-12 psi
Tip	0.055-0.070 in.
Reducer	water
Reduction Rate	10-25%

HVLP Spray: Texture Coat

Air Pressure	4-6 psi
Fluid Pressure	6-10 psi
Tip	0.055-0.070 in.
Reduction Rate	0-10%

Allow the texture coat to flash off for 15-20 minutes before baking.

The texture may be varied by adjusting the atomizing and fluid pressures until the desired texture size is obtained. Lower atomizing pressures give a larger texture pattern. Higher atomizing pressure reduces the texture size.

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.

ADDITIONAL INFORMATION

1. Paint should be mixed mechanically with a mixing blade for 5 minutes before used. A paint shaker is not adequate agitation.
2. Avoid freezing. Store at temperatures of 50° F to 100° F.
3. Product is thixotropic. Do not use viscosity cup to measure viscosity. Do not reduce over 10%.
4. A minimum of 1.1 mils dry film per coat is required for good adhesion and film integrity.
5. Addition of water will lower viscosity and may cause poor texturing.
6. Some substrates may show lower pencil hardness with full cure. This may be due to adhesion, substrate profile, and substrate cleaning/pretreatment. Higher film thickness may also give lower pencil hardness.
7. Kem Aqua® colorants not to exceed 8 ounces per gallon.
8. Gloss levels may be adjusted by using D64F505 Kem Aqua® Flatting Base. Refer to data sheet CC-S13 for details.
9. Keep container closed to prevent skinning of this fast dry coating. Filtering may be required.

Performance Tests

24 gauge Bonderite® 1000 steel panels at 3.0 mils textured DFT	
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 one 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 H_2SO_4	Excellent
5% Tide® solution	Excellent

Stain Resistance

After ½ hour spot test

Coffee	Excellent
Vaseline®	Excellent
Coca-Cola®	Excellent
Ketchup®	Excellent
Motor oil	Excellent
Gasoline	Excellent
Lipstick	Excellent
MEK Resistance (50 double rubs)	Pass

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.

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

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