



**SHERWIN
WILLIAMS.**

Chemical Coatings

CC-E23

KEM AQUA® 1500T Waterborne Baking Enamel

Black F83B650
Clear F83F660

Gloss Clear F83V659

White F83W652

<u>DESCRIPTION</u>	<u>CHARACTERISTICS</u>	<u>SPECIFICATIONS</u>
<p>KEM AQUA® 1500T Waterborne Baking Enamel is a one component, water reducible, thermoset baking enamel for the electronic enclosure and general metal market. This product can be used as a smooth or texture coating.</p> <p>Advantages:</p> <ul style="list-style-type: none"> VOC of less than 2.0 lbs/gallon less water Volatile Organic Emissions are under 0.9 lb/gallon High quality - meets the performance requirements for many of the electronic enclosures markets including business machines, medical equipment, consumer electronics, and telecommunications Excellent adhesion and mar resistance One package performance - no catalyst Monobake of basecoat and texture system Reduced with water - means considerable cost savings in solvents Water can be used for clean up of spray guns and other equipment Lower odor, improved working conditions. Also reduced fire hazards - possible lower insurance rates Free of lead and chromate hazards Can be applied directly to properly prepared steel surfaces 	<p>Gloss (60°): 20-30 units (Gloss Clear F83V659 is 70 units)</p> <p>Volume Solids: 30-35% varies by color</p> <p>Viscosity: 80-90 Krebs Units</p> <p>Recommended film thickness: Mils Wet 3.0 - 4.0 Mils Dry 1.0 - 1.25</p> <p>Spreading Rate (no application loss) @ 1-1.25 mil dft: 385 - 561 sq ft/gal</p> <p>Baking Schedule: 30 minutes at 300°F or 20 minutes at 325°F Note: Flash 15-20 minutes between smooth and texture coat. Good air movement helps water evaporation during flash-off.</p> <p>Flash Point: None - Seta Flash Closed Cup</p> <p>Package Life: 1 year, unopened</p> <p>Storage: Store indoors - protect from freezing</p> <p>pH: 8.3-8.7</p> <p>Air Quality Data: Non-photochemically reactive Volatile Organic Compounds (VOC) as packaged, less water, maximum 2.0 lb/gal, 240 g/L Volatile Organic Emissions as packaged, maximum 0.9 lb/gal, 108 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 or Galvanized Steel: For best results, treat the surface with a proprietary chrome phosphate metal treatment, or prime with Kem Aqua Wash Primer, E61G520.</p> <p>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.</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 and compatibility prior to full scale application.</p>

APPLICATION

Typical Setups

A textured finish is produced by two coat application. Recommended procedures must be followed to obtain the desired texture appearance.

Basecoat/Smoothcoat: Reduce 5-15% with water. Spray a full wet coat (3.0-3.5 mils wet) and flash off for a minimum of 15 minutes.

Texture: Reduce 0-15% with water. Spray the texture coat using pressure pot and equipment as follows:

Atomizing Pressure 10-20 PSI
Fluid Pressure 10-30 PSI

The texture may be varied by adjusting the atomizing and fluid pressure until the desired size is obtained. Lower atomizing pressure gives larger pattern. Higher atomizing pressure reduces texture size. Allow texture to flash off for 20-30 minutes before baking. For aluminum substrates allow a longer flash time.

Conventional Spray:

Air Pressure 50-55 psi
Fluid Pressure 10-15 psi
Cap/Tip 704/FF

Electrostatic Spray:

Atomizing Air 60 psi

HVLP: DeVilbiss JGHV

Atomizing Air Pressure at the Cap ... 9 psi
Fluid Pressure 10-15 psi
Cap/Tip 46MP/FF

Cleanup:

Clean tools/equipment immediately after use with water, immediately followed by a dilute blend of water and ammonia as soon as possible. A blend of water and Butyl Cellosolve may also be used. Follow manufacturer's safety recommendations when using any solvent.

SPECIFICATIONS

Product Limitations:

- Avoid freezing. Store at temperatures of 50°F minimum to 100°F maximum. Freezing will destroy the product quality.
- Allow 15-20 minutes flash-off of basecoat before applying texture coat.
- Heavier gauge metal may require higher temperature and longer baking schedule.
- Texture patterns dependent on equipment set up, viscosity and operator technique.
- Do not use Gloss Clear F83V659 and Clear F83F660 by themselves. They are intended for blending and gloss adjustment only.

Performance Tests

Substrate: 24 gauge Bonderite 1000 panels at 1.0-1.25

Salt Spray Test (5% salt fog - textured)

ASTM B117 144 hours
Humidity

ASTM D2247, 100°F, 100% RH ... 288 hours
Impact Resistance, Direct

ASTM D2794 160 in lb

Impact Resistance, Reverse

ASTM D2794 100 in lb

Pencil Hardness

ASTM D3363 H minimum

MEK Resistance

100 double rubs slight to no burnish

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.

Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area.

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: In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. 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.

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.20078-100402.

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.