# Unique Environmentally Friendly, Water Based Corrosion Prevention Coating For Military Equipment Used In Actual Or Simulated Combat Conditions





ENVIRO-KOTE

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## ENVIRO-KOTE

Blue River Coatings ENVIRO-KOTE is a two-component clear coat treatment system designed for Original Equipment Manufactures (OEM) to protect the substrate over which it is applied from oxidation and abrasion. ENVIRO-KOTE, when applied properly, will not yelllow, chip, crack or peel. If gouged or damaged, the finish will not experience creepage and is repirable. The product is designed to coat surfaces that require a hard, flexible, and chemical resistant thin coating that can withstand temperatures of 2,000°F. ENVIRO-COAT offers excellent coverage, durability, and oxidation protection as well as being a low VOC and EPA compliant coating. ENVIRO-KOTE is applied clear and will dry clear.

#### **CHARACTERISTICS**

- Excellent Hardness
- Excellent Flexibility
- Excellent Impact Resistance
- Excellent Adhesion, Mar, And Abrasion Resistance
- Excellent Heat Tolerance (2000°F+ With No Visible Affects)
- Excellent Chemical Resistance
- Available In Satin To Gloss Finish
- Non-photochemically Reactive
- Application by spraying, dipping, wiping, or brushing
- Little to no irritating odor
- Solvent is used for clean-up
- Non-hazardous
- Air dry or force curing preferred
- Product life of 24 hours
- No special safety equipment required

#### AIR QUALITY DATA

- Free of lead and cromates
- VOC (Volatile Organic Compounds) 2.8 lb/gal;
  336 gm/ltr when catalyzed

### **USES**

- Brass
- Aluminum
- Copper
- Ceramic Tile and Porcelain
- Welding Tips/Nozzles
- Plastics
- Plexiglas
- Topcoat For Paints
- Topcoat For Powder Coating





Blue river Coatings EVIRO-COAT is considered non-hazardous by EPA definitions and does not contain lead or chromates. The solid and semi-solid sludge produced in spraying and clean up can be dried and sent to a "Class B" landfill. Please follow local and state regulations in the proper use and disposal of this product.

# ENVIRO-KOTE

#### PHYSICAL DATA

- Liquid, clear
- Specific Gravity: >1
- Evaporation Rate: Slower than either
- VOC: 2.8 lb/gal; 336 gm/ltr
- % Solid by weight: 25%
- % Solid by volume: 22%
- Weight per gallon: 8.34 lbs.
- Flash Point: 150°F CC Part A
- Flash Point: 47°F CC Part B

#### PERFORMANCE DATA

Recommended film thickness for test results on Aluminum is 0.1 mil.

- Salt Spray: Excellent-Passed 2000 hour test with no visible effects
- UV Resistance: Excellent
- Solvent resistance: 20 Double-rubs MEK, Xylene, Acetone
- Flexibility: Excellent
- Theoretical Coverage at 0.1 mil: 3,528 ft<sup>2</sup> (1604 x 22% solids by volume)
- Hardness: up to 6H-Excellent
- Drying Time (Air Dry): Recoat Before 1 hour @ 50% humidity and 75°F
- Drying Time (Air Dry): Dust free 20 min
  © 50% humidity and 75°F
- Drying Time (Air Dry): Dry to Handle 1 hour @ 50% humidity and 75°F

### **SPECIFICATIONS**

METALS: Surface must be free of grease, oil, dirt, and other foreign matter. Oxidation material must be removed.

PLASTICS: Surface must be free of grease, oil, dirt and other foreign matter

PAINTS: Surface must be free of grease, oil, dirt, and other foreign matter and completely cured.

POWDERCOATING: Surface must be free of grease, oil, dirt and other foreign matter.





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#### **APPLICATION**

Application is by spraying, dipping, or wiping. A very thin film is all that is required for average protection. Amount of coverage per gallon is dependent upon the applicator and the equipment used. For best results, product should be applied to preheated (120°F) substrate or heat cured for 20 minutes at 250°F. Regular air-drying is acceptable but cure times will be longer. Insure that proper protective clothing and equipment is used during application. wear INIOSH approved respirator and solvent resistance gloves.

Mixing Instructions - To obtain the optimum performance, the mixing instructions for Enviro-Kote must be followed precisely. Each component has been precisely formulated for optimum flow and hardness characteristics.

- 1. In a glass or metal container, measure three parts by volume of Part A to one part by volume of Part B. Do not use plastic or paper containers.
- 2. Under constant agitation, mix the combined parts for 60 minutes or until the liquid becomes clear. Let stand for 1 hour. Temperature will be a factor in the mixing process. The catalyzed product will have a pot life of at least 24 hours. Refrigeration of the product may extend the pot life.

#### **Spraying Enviro-Kote**

- 1. For best results, the fluid nozzle on the spray equipment should be very small, 0.5 to 1.0 will provide the best application. The viscosity of the catalyzed product is very close to water, 14-16 seconds on a Zahn #2 cup.
- 2. The first pass of spraying should be a light mist or fog coat. the second coat should be light and thin. Once the coating has air-dried for 10-20 minutes; it cannot be recoated unless it is allowed to fully cure.
- 3. Full cure can be achieved in 30 minutes with the addition of heat (200-500°F) and sufficient air movement.

4. Parts can be handled in 30 minutes with air-drying. Caution: Full cure may not occur for 5 days without adding heat. Note: Most catalyzed systems require 10-15 days before a qualified ASTM test can be preformed. 5. If the substrate is heated before spraying, the product can be built up to approximately 0.5 mil thickness. Normally the spray coat will produce a 0.1mil thick coating.

#### Wiping Environ-Kote (unpolished surfaces)

- 1. Use clean, soft, lint free cloths or high-quality paper towels. Protect skin by wearing light rubber gloves. (Latex examination gloves work best). This will prevent the product from drying out the skin.
- 2. Using a finger pump mister, apply a light fog coat to the surface.
- 3. Using a soft lint free cloth, wipe the misted Environ-Kote into the surface.

Wiping Environ-Kote (highly polished surfaces)

1. Consult Blue River Coatings

#### Dipping into Environ-Kote

- 1. Submerge clean part into the Environ-Kote mixture and let the excess material drip off.
- 2. Environ-Kote has low surface tension and it may be necessary to wick off excess Environ-Kote accumulating at the bottom of the part by touching with a dry paper towel.
- 3. Parts that are dipped may be placed on a clean, absorbent cloth or towel to wick off excess Environ-Kote.

#### **CLEAN-UP**

Use solvent for cleanup such as acetone or MEK. Insure that proper protective clothing and equipment is used during application and cleanup.



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