CERAMIC PROTECTIVE COATING

PRODUCT DESCRIPTION

CERAMLOCK 900 Series is a clear CERAMIC PROTECTIVE COATING capable of providing extremely high levels of chemical and thermal protection in very thin films. **Formulated using Nanotechnology** Ceramlock withstands substrate temperatures over 500f. It will air cure over a period of 24 hours, though it will be dry to the touch and accept reasonable handling in less than 1 hour and may be placed in service after 8 to 10 hours. Maximum protection is achieved after 7 days. Ceramlock requires no surface etch and will bond to extremely smooth surfaces. Simply degrease and apply. The coating cures to a very hard, smooth surface with excellent adhesion and resistance to UV. Ceramlock is solvent based with a very low to no V.O.C.

RECOMMENDED USES

Ceramlock is primarily designed as a clear ceramic protective coating with excellent chemical and corrosion resistance. It can be apply to any polished metal such as aluminum, brass, bronze, steel, Stainless Steel, Titanium, Magnesium, Chrome plating {with primer] or to glass, ceramics, plastics, fiberglass including flashed chrome plastic, paint and other polymers. The final film thickness is less than .001"and provides a glass smooth finish.

CERAMIC AND NANOTECHNOLOGY

Nanotechnology is the understanding and control of molecules at dimensions between approximately 1 and 100 nanometers. A nanometer is one-billionth of a meter. In reference a sheet of paper is about 100,000 nanometers. 1 nanometer would be equivalent to 1/30,000th the width of a human hair.

PRODUCT DATA SHEET

CERAMLOCK 900 Series AEROSPACE COATING

CHEMICAL RESISTANCE: Excellent

TEMPERATURE RESISTANCE: to 600f substrate.

FLEXIBILITY: Good

WEATHERING: Excellent

ABRASION RESISTANCE: N/E

SUBSTRATES: May be applied to both ferrous and non-ferrous metals, glass, ceramics, and plastics as well as over other paints and coatings.

COLORS: Clear

TOPCOAT REQUIRED: None

SPECIAL TREATMENT: None

COMPATIBILITY WITH OTHER COATINGS: N/E

THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL: <30% WT.

PRIMER: No primer needed.

RECOMMENDED DRY FILM THICKNESS PER COAT: .0003" to .001"

THEORETICAL COVERAGE: Varies with thickness. Approximately 2500 sq/ft at 0.23 mil.

BURNISHING: None

SHELF LIFE: 1 year.

GLOSS: Clear and imparts a gloss

NOT RECOMMENDED FOR: Highly porous surfaces.

APPROXIMATE SHIPPING WEIGHT: 946gr per L

FLASH POINT: 26C/79F

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SURFACE PREPARATION

All surfaces must be absolutely free of oils, grease, moisture, dust, scale or corrosion.
Degrease using a solvent that leaves no residue. Denatured alcohol and Xylene are very good for cleaning and preparing the surface. ******DO NOT USE petroleum based solvents.******

APPLICATION TEMPERATURES

	Material	Surfaces	Ambient
Normal (65-85% Humidity)	18-30ºC	18-30ºC	16-32ºC
Minimum (50% Humidity)	13ºC	13ºC	10ºC
Maximum (95% Humidity)	35ºC	38ºC	38ºC

NOTE: HUMIDITY accelerates flashing and curing of Ceramlock.

NO MIXING REQUIRED

Shake & Stir well

MANUAL APPLICATION

Apply coating using a clean dry lint free cloth such as a diaper cloth. Moisten your applicator with Ceramlock and apply in 10-20% overlapping patterns to insure complete coverage and achieve a thickness of .0003" to .0005". Only apply 1 swipe. If you miss a spot cover it in 1 swipe within 60-90 seconds. Do not work the product back and forth. It will ruin the finish. It is advised to practice on a sample piece. If any streaking is apparent try keeping your applicator wetter.

SPRAY APPLICATION

Apply coating in light fog passes (approximately 20% overlap) to achieve a thickness of .0003" to .0005". Use sufficient air volume for correct operation of equipment. (Minimum 30 PSI) Minimum air, coating and part temperature should be 65f, if below warm up part and coating. Spray at a right angle to part with a 1mm or smaller nozzle size. Wait approximately 10 minutes (this time will vary with temperature and to a greater degree with humidity levels) between coats if more than one coat is desired. DO NOT wait more than 20 to 30 minutes depending on ambient temperature and humidity before applying a second or any subsequent coats.