

Chem-Clear 100 2k

Endura-Clad Coatings

Polyurethane Clearcoat

Product Description

Chem-Clear 100 2k is a low VOC two part polyurethane clear coat.

Advantages

- Very good color fastness
- VOC conforming & HAPS
- Exterior
- Good flexibility
- Good flow and leveling
- Spray, brush, or roll

Product Characteristics

Resin	Polyurethane
Clean-Up	Xylene
Flash Point	54°F
Finish:	High Gloss (90)
Color:	Clear
Volume Solids:	33% ± 2%
Weight Solids:	30% ± 2%
Weight per Gal:	9.90 ± 2%
VOC (unreduced):	< 100 g/l; 0.8lb/gal
Packaging:	1 gallon containers
Storage:	Store indoors at 35°F - 120°F. Protect from freezing.
Shelf Life	12 month unopened from date of manufacture

Theoretical Coverage Rate per Gallon:

	528	264	176
Square ft coverage rate per gal			
Wet mil film application rate	3.03	6.06	9.09
Dry mil film thickness achieved	1.00	2.00	3.00

Film builds **below 1.25 mils total DFT** will not provide maximum film properties. Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, or method of application.

Drying Schedule @ 4.5 mils wet

Applied @50%RH	50°	77°	90°	Fahrenheit
To touch		20 min.		
To handle		4.5hr		
To recoat		1-2 hr.		
To cure		7 days		
Pot Life	2 hr			
Sweat in time	1 minute			
Activation	Chem-Clear 2K Activator			

Application Conditions

Do not apply if the application surface or ambient temperature is below 50°F (10°C) or above 100°F (38°C), or if the atmospheric temperature is within 5°F of the dew point. Relative humidity should be below 90%. Don't apply when there is a risk of rain or freezing temperatures within 12 hours after application. Don't apply within 2 hours of sunset if the temperature is below 60 degrees.

Recommended Uses

Designed as a clear topcoat for repainting prefinished metal surfaces including SMP coil coated sheet metal that is used in the manufacturer of rolling steel doors, roofs, gutters, and metal siding. Used as a clearcoat to revive the gloss and restore color to faded doors.

- Self Storage Facilities
- Repainting interior or exterior metal wall systems.
- Economical refinish system for roll doors
- Gutters, downspouts and trim

Not Recommended for:

- Immersion service
- Floors

Recommended Substrates

- Previously Painted Surfaces
- SMP coil coated steel

Compatibility with other Coatings

- Highly compatible with most coating types. It may be used over most aged and hard-cured coatings in good condition.
- Can be used otop all Endura-Clad & Chem-Bake primers
- Can be used over Chem-Bake 8000 after 2 hours where additional gloss, and UV resistance are required.
- Can be used over Chem-Bake XLT after 24 hours.
- Can be used over Endura-Guard products where additional gloss, UV and chemical resistance are required.

Testing for lifting, bubbling and adhesion is recommended to assure compatibility with unknown coatings.

Performance Characteristics & ASTM Data

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Surface Preparation

The service life of the coating is directly related to the surface preparation. Surfaces to be painted should be clean, dry and free from wax, grease, dust, silicone, oil and excessive chalk. Do not use hydrocarbon solvents for cleaning. If solvent cleaning is required use acetone.

Remove all surface contamination by washing with an appropriate cleaner, rinse thoroughly and allow to dry. Seal stains from water, smoke, ink, pencil, grease, etc. with the appropriate primer/sealer. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

Existing Painted Surfaces: Remove all oil, dust, grease, dirt, chalk, rust, loose or peeling paint and all foreign matter. Scrape and sand peeled or checked paint to a sound surface. Steel rust and mill scale must be removed using sandpaper, wire brush, or other abrading method. Bare steel must be primed the same day as cleaned. Glossy or smooth hard surfaces should be dulled and/or abraded using Sand & Scrub cleaning mixture, silicon carbide sandpaper, Scotch-Brite® or other abrading medium to create a surface profile. If adequate surface profile is not achieved then *Chem-Bake*® bonding primer is recommended.

Aluminum and Galvanized Steel: Not applicable

Masonry, Concrete, Block, Stucco: Not applicable

Wood, Plywood, Composition Board: Not applicable.

Mildew Prior to attempting to remove mildew, it is recommended to test any cleaner on a small, inconspicuous area prior to use. Bleach and bleaching type cleaners may damage or discolor existing paint films. Bleach alternative cleaning solutions may be advised. Mildew may be removed before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Application Instructions

Airless Sprayer: Recommended. Use spray equipment that delivers paint at an even consistent pressure without "surge". The sprayer, hoses and gun must be thoroughly clean and flushed with solvent. Always use a hose that is dedicated for spraying solvent based coatings, separate from spraying water based products. Spray with the least amount of pressure that still atomizes the paint properly. Recommended tip size and type: .010 -.014 fine finish.

When spraying use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle. Application in two light coats is generally better than one heavy coat.

Clean-Up

Clean spills and spatters immediately with thinner. Clean hands and tools immediately after use with thinner. Never leave material in equipment when not in use. Dried paint film, spray equipment, and mixing equipment can be cleaned by soaking and scrubbing with acetone.

Mixing & Reduction

Mixing: Chem-Clear 100 2k Step is a two component product. Mix contents of each container in a strict 4:1 ratio. Use Chem-Clear 100 2K activator. Read the specification guide for details.

Thinning: 1 QUART OF REDUCER PER KIT IS REQUIRED FOR USE

Safety & Handling

For use only by professional, trained painters. Before using, read and follow all label and MSDS precautions. When handling or applying any industrial coating always wear chemical resistant gloves and avoid contact with the skin. Always use a properly fitted respirator that employs chemical cartridges while handling, mixing, or spraying. If mixed with other components, mixture will have hazards of all components. All technical advice, recommendations and services are rendered by the Seller gratis. They are based on technical data which the Seller believes to be reliable, and are intended for professional use by persons having skill and know-how at their own discretion and risk. Seller assumes no responsibility for results obtained or damages incurred from their use by Buyer in whole or in part. Published technical data and instructions are subject to change without notice.

Warranty: All products are warranted to be free of manufacturing defects. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product.