XGEN COATING SYSTEM™

X-PROTECT®
PERFORMANCE TOPCOAT
HIGH GLOSS

TECHNICAL PRODUCT DATA SHEET (Page 1 of 3)

PRODUCT DESCRIPTION - xGen Coating System's X-PROTECT Performance Topcoat - High Gloss is a two-component clear coat treatment system designed for long-term protection of various surfaces. X-PROTECT Performance Topcoat - High Gloss will not yellow, chip, crack, or peel. If gouged or damaged, the finish is repairable. The product is designed to coat surfaces that require a hard, flexible, and corrosion-resistant thin coating. A value-added benefit of X-PROTECT Performance Topcoat - High Gloss is that is can withstand temperatures of 2,000˚F/1093˚C. X-PROTECT Performance Topcoat - High Gloss offers excellent coverage, durability, and oxidation protection as well as being an EPA compliant coating. X-PROTECT Performance Topcoat - High Gloss is applied clear and will dry clear.

ENVIRONMENTAL ADVANTAGES - xGen Coating System's X-PROTECT Performance Topcoat - High Gloss is an EPA compliant coating 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.

CHARACTERISTICS

- Excellent hardness
- Excellent flexibility
- Excellent impact resistance
- Excellent adhesion, mar, and abrasion resistance
- Excellent heat tolerance (2000˚F/1093˚C+ with no visible effects)
- Excellent chemical resistance
- Gloss finish
- Non-photochemical reactive
- Application by spraying, roller or pad
- Little odor
- Solvent is used for clean-up
- Air dry or force curing preferred
- Pot life of 24 hours
- No special safety equipment required

USES

- Porcelain Tile
- Clay Tile
- Quarry Tiles
- All Grouts
- Terrazzo
- Concrete
- Marble
- Most any Tile & Grout Environment

AIR QUALITY DATA

- Free of lead and chromates
- VOC (Volatile Organic Compounds) 1.2 lb/gal; 144 gm/ltr when catalyzed

PHYSICAL DATA

- Liquid, clear
- Specific Gravity: >1
- Evaporation Rate: Slower than ether
- VOC: 1.2 lbs/gal; 144 gm/lt when catalyzed
- % Solid by weight: 73.8%
- % Solid by volume: 70.1%
- Weight per gallon: 8.29 lbs
- Flash Point: > 150˚F / 22˚C Part A
- Flash Point: >150˚F ; 66˚C Part B

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APPLICATION

Salt Spray: Excellent-Passed 4,000 hour test with no visible effects on aluminum
UV Resistance: Excellent
Solvent Resistance: 50+ Double-rubs MEK, Xylene, Acetone
Flexibility: Excellent on aluminum Q panel
Theoretical Coverage at 0.2 mil: 1,123 sq. ft. (1,604 x 70.1% solids by volume)
Hardness: Excellent - Up to 4H
Drying Time (Air Dry): Recoat – Before 1 hour @ 50% humidity and 75˚F/23.9˚C
Drying Time (Air Dry): Dust Free – 20 minutes @ 50% humidity and 75˚F/23.9˚C
Drying Time (Air Dry): Dry to Handle – 1-2 hours @ 50% humidity and 75˚F/23.9˚C

SPECIFICATIONS - Surface must be free of grease, oil, dirt, and other foreign matter.

CLEANING / PRETREATMENT

Cleaning and Pretreatment: Cleaning and pretreatment are critical for success of any coating system. As each application may be different, the cleaning/preparation may be different as well. xGen Coating System recommends different cleaning/pretreatment processes depending upon each application and the amount of cleaning required:

General Purpose Cleaning/Degreasing: Use xGen Coating System's X-CLEAN & PREP. This concentration will be sufficient for general cleaning/degreasing of the surface to be coated. Use appropriate cleaning equipment (clean cloth/rag, scrubbing brush, spray bottle, pump-up sprayer or pressure washer) for the substrate in question. If the recommended concentration is not sufficient to achieve adequate cleaning results, use a stronger concentration for more aggressive cleaning. If a stronger concentration is used, thoroughly rinse the surface to remove any cleaning solution residue prior to coating. If cleaning/coating a vertical surface, work methodically from the top of the substrate down to the bottom to ensure adequate cleaning, rinsing (if required), and coating are completed. Make sure the substrate to be coated is completely dry prior to X-PROTECT Performance Topcoat - High Gloss application.

MIXING INSTRUCTIONS

To obtain optimum performance, the mixing instructions for X-PROTECT Performance Topcoat - High Gloss must be followed precisely. Each component has been precisely formulated for optimum flow and hardness characteristics.

- This is a two (2) part component mix consisting of 3 Parts "A" to 1 Part "B".
- The 2-part components, when mixed completely, result in the predefined kit size (quart, gallon, etc.).
- Wear appropriate safety equipment during mixing to include latex or nitrile gloves and safety goggles.
- In a clean glass, metal, or HDPE plastic container, mix parts by volume component A with component B.
- Under constant agitation with a laboratory magnetic stirrer, variable speed drill or drill press, mix for 30-45 minutes until the liquid becomes clear. Let the product stand uncovered estimated 10 minutes prior to application. This induction or sweat-in period is required to ensure that the product is catalyzed properly. During the mixing/catalyzation process, the combined products may generate a slight exothermic heat reaction and the sides of the container may feel warm to the touch. This reaction is normal. The catalyzed product will have a pot life of at least 24 hours. If temperatures are above 90˚F/32.2˚C, pot life may be shortened.

NOTE: For each ounce of Part "B", add 3 ounces of Part "A". Mix for 20-30 minutes. NOTE: mixture will turn to a "yellowish / lime green color" and container will get warm to touch. When mixture turns "clear", (approximately 20-30 minutes) let dwell for 15 minutes and product is ready to apply.

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APPLICATION

Application is by spraying, roller or pad. Amount of coverage per gallon is dependent upon the applicator and the equipment used. For faster dry, product may be heat cured for 30 minutes at 250˚F/121˚C but ambient drying conditions (5 days for full cure) are sufficient if time is available. Regular air-drying is acceptable but cure times will be longer. Ensure that proper protective clothing and equipment is used during application. Wear NIOSH approved respirator and solvent resistance gloves and safety goggles.

Spraying X-PROTECT Performance Topcoat - High Gloss with Standard Spray Painting Equipment

- Wear appropriate safety equipment during mixing to include latex or nitrile gloves and safety goggles.
- Mix X-PROTECT Performance Topcoat - High Gloss as instructed.
- For best results, the fluid nozzle on the spray equipment should be very small, 0.5 to 1.0 will provide the best application. Fluid Nozzle sizes will be dependent upon the equipment used. Please consult with your local equipment supplier for the best equipment choice for the application. The viscosity of the catalyzed product is very close to water, 14-16 seconds on a Zahn #2 viscosity cup.
- The first pass of spraying should be a light mist or fog coat. The second coat should be a light to medium wet coat. If a third application is necessary, allow the product to set/air dry for 10-20 minutes before recoating. Recoating cannot be accomplished if the coating has cured for an hour or longer.
- Surface cure can be achieved in 30 minutes with the addition of heat (200-500˚F/93-260˚C) and sufficient air movement.
- Surface may be walked on within 18-24 hours

RECOAT APPLICATION PROCESS:

A recoat application becomes necessary under two basic conditions:

1. If the original product application fails or has problems:
   a. When the product has dried (or within 24 hours), remove the product through scraping or mechanical sanding (wet or dry). Thoroughly rinse and clean the surface so it is free and clear of sanding dust. Test pH level to make sure it is under 6. Let dry. Prep, mix and re-apply the product per instructions above.
2. When a future recoat is needed:
   a. The remaining initial coating needs to be sanded using 180-220 grit sanding screens. Sand the surface until all glossy areas are “dull” and no longer glossy. Thoroughly rinse and clean the surface so it is free and clear of sanding dust. Test pH level to make sure it is under 6. Let dry. Prep, mix and re-apply the product per instructions above.

CLEAN-UP

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

WARRANTY

The technical data contained herein is accurate to the best of our knowledge. xGen Coating System warrants that coatings represented herein meet their formulation standards. No other warranty is expressed or implied, including warranties of merchantability and fitness for a particular purpose. Published technical data and instructions are subject to change without notice. Contact your XGen Coating System’s Representative for current technical data and instructions.