



PRODUCT DATA

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CORDURITE HI BUILD EPOXY "SOLVENT BASE"

PRODUCT CODE: 104 - OXX

PRODUCT DESCRIPTION: Cordurite Hi Build Epoxy is a two component, epoxy-polyamide, with a high gloss vitreous finish that is superb in resisting stains, chemical fumes, algae, numerous acids, corrosion and alkalis. This product has the ability to retain its durable finish while withstanding countless numbers of scrub-washing and its many industrial application qualities such as pot life (8 Hours), tenacious adhesion, superior flow and flexibility makes Cordurite the choice multipurpose universal maintenance coating for even the most extreme industrial environment.

INTENDED USE: Cordurite is designed to be used as the ultimate maintenance and appliance finish on interior or exterior surfaces such as **wood, metal, fiberglass or concrete**. This product has been U.S.D.A. approved for incidental food contact only in **food processing areas**, (in white and selected pastel colors), (non toxic when dry) and is the selected choice for **factory, institutional, dairy, garage and other high traffic areas**. Its superior toughness, plus resistance to thermal shock makes it ideal for large surface areas such as **equipment in food processing areas, interior and exterior structural surfaces (i.e. Exteriors of tanks), that are not exposed to the elements**.

NOTE: Avoid using Cordurite Hi Build Epoxy on surfaces that will be exposed to the Ultra-Violet Rays and other weathering elements of the sun for extended periods of time.

Cordurite is available in a Clear Finish as well as eight ready mix colors

104 - 011 SKIPPER WHITE	104 - 012 CRUISER RED	104 - 013 CABIN YELLOW	104 - 014 PACIFIC GREEN	104 - 015 POOL BLUE
104 - 016 DECK GRAY	104 - 017 JET BLACK	104 - 018 CLEAR	104 - 019 TILE RED	104 - 020 CORDURITE CONVERTER

RECOMMENDED PRIMERS

WOOD SURFACES:
MASONRY, CONCRETE:

Simpson Coatings Catalyzed Epoxy Coating # 104-0XX.
Simpson Coatings Latex Block Filler #108-031.
Simpson Coatings Water Base Epoxy Surface Conditioner #104-052C.
Simpson Coatings P.V.A. Sealer #108-011.

METAL SURFACES:

Simpson Coatings Cordurite Epoxy Zinc Chromate Primer #104-021C.
Simpson Coatings Vinyl Wash Primer DOD-P-15328 #111-055C.

SURFACE PREPARATION

WARNING!

If you scrape, sand, or remove Old Paint, you may release Lead Dust. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.** Wear a NIOSH-Approved Respirator to control Lead Exposure. Clean up carefully with a HEPA Vacuum and Wet Mop. Before you start, find out how to protect yourself and your family by contacting The National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

ALL SURFACES: Must be clean, dry and free of dust, dirt, oil, grease, wax or any contamination that would adversely affect the adhesion or performance of this coating. Remove all oil, dirt and other contaminants by cleaning with a V.O.C. compliant commercial cleaner/degreaser. Rinse thoroughly and allow to dry.

ALL MILDEWED SURFACES: Existing mildew should be removed by washing the affected areas with a 3:1 solution of water and chlorine bleach or a reliable commercial mildewcide. Keep applying until all discoloration is removed. Rinse and allow surface to dry thoroughly before coating.

NEW SURFACES

NEW WOOD SURFACES: Where appropriate sand the surface until smooth. If mildew is present remove as described above. Apply one coat of Catalyzed Cordurite Epoxy for the prime coat. Putty and caulk should be applied after the first prime coat. Allow 4 to 6 hours dry time before recoating with finish coat.

NEW MASONRY, CONCRETE, TILT UP OR UNCOATED MASONRY SURFACES: For uncoated masonry, concrete, and tilt up surfaces, fill with Simpson Coatings Latex Block Filler #108-031. Allow 16 to 24 hours dry time, followed by a seal coat of Simpson Coatings Water Base Epoxy Surface Conditioner #104-052C. (Must be recoated within 14 days). Allow 16 to 24 hours to dry before recoating with the Cordurite Epoxy Finish Product.

NOTE: All New Masonry, Concrete and Tilt Up substrates should cure for a minimum of 30 days before coating. Very dense, non porous, or chemically treated concrete may require overall etching, abrasive blasting or sanding to achieve proper coating adhesion.

NEW METAL SURFACES: Prepare new metal surfaces as directed with all surfaces. Apply one coat of Cordurite Epoxy Zinc Chromate #104-021C. Dry time to recoat with the Cordurite Epoxy Finish Product is 4 to 6 hours.

FERROUS, GALVANIZED SURFACES: Galvanized steel surfaces can be variable substrates due to the changing process of the Galvanizing Industry and/or the age of the galvanizing. Etch all galvanized and ferrous metal surfaces with Simpson Coatings Pretreatment Vinyl Wash Primer #111-055C DOD-P-15328, a two component system composed of 4 parts #111-055A and one part #111-055B, applied at .25 to .5 mils dry, **allowing 30 minutes to 1 hour dry time** to recoat with Cordurite Zinc Chromate Epoxy Primer #104-021C. Dry time to recoat with Catalyzed Cordurite Epoxy Finish is 16 to 24 hours.

NOTE: Pretreatment Vinyl Wash Primer is intended to be used as a surface treatment to increase maximum adhesion in the primer system. To insure best results the Pretreatment should be recoated with Cordurite Zinc Chromate Epoxy Primer as soon as the material is sufficiently dry as directed (must be recoated within 4 hours).

PREVIOUSLY COATED SURFACES

ALL PREVIOUSLY COATED SURFACES:

Clean thoroughly as directed for all surfaces. Remove all loose peeling paint and chalk oxidation by sanding or pressure washing. Glossy surfaces should be dulled by sanding for maximum adhesion. Sand blasting or high-pressure water jet is recommended for the more severely deteriorated surfaces.

PREVIOUSLY COATED WOOD SURFACES:

Clean thoroughly as directed above for all previously coated surfaces. Apply one coat of Catalyzed Cordurite Epoxy, allowing 4 to 6 hours dry time before recoating with the Cordurite Epoxy Finish Coat.

PREVIOUSLY COATED MASONRY, CONCRETE, TILT UP SURFACES:

Scrape, wire brush, mechanical grind or sand blast to remove loose, unsound concrete or any efflorescence, laitance (white powder or dust) from the surface. This should be followed by compressed air removal. Surfaces with mold or mildew should be cleaned with a commercial mildew remover and rinsed thoroughly with water. Remove any mold release oil with Simpson Coatings Xylol #301-011. **EXCEPT AS RESTRICTED BY YOUR LOCAL AIR QUALITY MANAGEMENT DISTRICT.** Fill with Simpson Coatings Latex Block Filler #108-031. Allow a 16 to 24 hour dry time before recoating with one coat of Simpson Coatings Water Base Epoxy Surface Conditioner #104-052C (must be recoated within 14 days). A 16 to 24 hour dry time must be allowed for recoating with the Cordurite Epoxy Finish Coat.

PREVIOUSLY COATED METAL SURFACES:

Remove loose rust, mill scale and deteriorated previous coatings by wire brushing or coarse sand paper. If rust is underneath the paint film, remove the paint finish until a ring of bright metal is exposed around the edges of rusted areas. Sand blasting or mechanical sanding is recommended for the heavily contaminated surfaces. Prime Coat with Cordurite Epoxy Zinc Chromate Primer #104-021C at 300 sq. ft. per gallon. Dry time to recoat with the Cordurite Epoxy Finish Coat is 4 to 6 hours.

APPLICATION

Estimation of practical coverage of this product can be variable and is completely dependent on application technique i.e., (determine amount of wet film thickness application to achieve dry film thickness) and the porosity of the substrate.

Drying time and curing time can be adversely affected by extreme high/low substrate and atmospheric temperature variances, along with extreme high/low humidity. Apply when **air, product and surface temperatures** are between **60 °F – 90 °F**, the relative humidity is no greater than **85%**, and surface is at least **5 °F** above the dew point.

Mix together one part Cordurite Base #104-0XX with one part Cordurite Converter #104-020. Mix only enough material that can be used in a Pot Life at 80 °F for 8 hours, at 100 °F for 3 hours. Do not recatalyze into expired material! Stir or agitate contents thoroughly. Allow the Cordurite base and converter to set for 45 to 60 minutes (induction time). Do not attempt to use other manufacturers Converters with the Cordurite Base or mix Cordurite with other products.

104 – OXX Cordurite Hi Build Epoxy continued

APPLICATION continued

WOOD SURFACES: Apply two coats of Cordurite with Professional Airless, Conventional or HVLP Spray Technology, in a cross hatched pattern, at 3.0 to 5.0 mils dry, allowing 4 to 6 hours in between each coat. For unpainted, porous, or, heavily grained soft wood, a third coat may be required. A 48-hour dry time should be allowed for light foot traffic. For heavy equipment such as hand trucks, forklifts, autos, etc., allow a full 7 to 10 day cure time.

MASONRY, CONCRETE AND TILT UP SURFACES: Apply two coats of Cordurite at 3.0 to 5.0 mils dry, allowing the first coat to dry for 4 to 6 hours. A 48-hour dry time must be allowed for light foot traffic, full 7 to 10 day cure time is required for heavy equipment traffic. Again if Cordurite is to be applied over an existing finish, a test patch should be made for adhesion.

ALL METAL SURFACES: Apply two coats at 3.0 to 5.0 mils dry, allowing 4 to 6 hours in between each coat. 48 hours dry time must be allowed for light foot traffic. For areas such as metal handrails, stairwells or where heavy equipment is used, allow 7 to 10 day cure time.

PREVIOUSLY COATED SURFACES: For previously painted surfaces a test patch of the Cordurite mixture is recommended. If lifting or wrinkling occurs, refrain from using the Cordurite System. If no lifting occurs, apply two coats of Cordurite at 3.0 to 5.0 mils dry film thickness, conduct crosshatch adhesion test.

THINNING/CLEAN – UP

AIR ATOMIZED/AIRLESS SPRAY: ***DO NOT THIN THESE PRODUCTS. These products are ready-to-apply as packaged. Thinning these products can adversely affect film building properties, dry/cure times, and volatile organic compound (V.O.C.) emissions. Please review the U.S. E.P.A. National Rule and your Local Air Quality Management Districts Rules and Regulations regarding V.O.C. emissions and Clean Up Products Regulations for Architectural and Industrial Maintenance Coatings. Do Not Exceed Two Ounces of Simpson Coatings Epoxy Spray Thinner #309–014 per gallon of Catalyzed Epoxy.***

CLEAN – UP: Use Simpson Coatings Acetone #304–013 for cleaning Application Tools and Spray Equipment only! **EXCEPT AS RESTRICTED BY YOUR LOCAL AIR QUALITY MANAGEMENT DISTRICT.**

EQUIPMENT RECOMMENDATIONS

BRUSH/ROLLER: Use a high quality natural pure bristle brush or mohair blend roller cover 1/4" or less for smooth finishes, 50/50 blend roller cover for masonry with heavily textured finishes.

SPRAY: Cordurite Catalyzed Epoxy Finish can be applied by Professional Airless, Conventional or HVLP Spray Technology.

104-0XX Cordurite Hi Build Epoxy "Solvent Base" Technical Data/Physical Properties

Resin Type: Epoxy - Polyamide
Solvents: Alcohol & Aromatic Hydrocarbons
Coatings V.O.C. Catalyzed < 420 G/L

PRODUCT	ANALYSIS						PRODUCT COVERAGE			
	Pigment % by weight	% Solids by weight	% Solids by volume	Gloss	Viscosity	Wt. Per Gallon	Recommended Dry Film Thickness	Recommended Wet Film Thickness	Practical Coverage (assume 15% material loss)	Theoretical Coverage @ 1 mil D.F.T.
104-011 Skipper White	37.5-38.1%	67.2-69.2%	52.3-54.3%	80+	88-96 KU	10.7-11.3	2.5-3.3 mils	5.0-6.0 mils	260-300 sq. ft.	300-350 sq. ft.
104-012 Cruiser Red	34.0-34.6%	67.3-69.3%	54.6-56.6%	80+	88-96 KU	10.0-10.6	2.5-3.3 mils	5.0-6.0 mils	300-350 sq. ft.	300-350 sq. ft.
104-013 Cabin Yellow	52.9-53.4%	76.4-78.4%	57.0-59.0%	80+	88-96 KU	13.1-13.7	2.5-3.3 mils	5.0-6.0 mils	300-350 sq. ft.	300-350 sq. ft.
104-014 Pacific Green	37.5-38.1%	67.7-69.7%	53.1-55.1%	80+	88-96 KU	10.7-11.3	2.5-3.3 mils	5.0-6.0 mils	300-350 sq. ft.	300-350 sq. ft.
104-015 Pool Blue	37.5-38.1%	67.7-69.7%	53.1-55.1%	80+	88-96 KU	10.7-11.3	2.5-3.3 mils	5.0-6.0 mils	300-350 sq. ft.	300-350 sq. ft.

Dry times @ 77° F and 50% R.H.

Tack Free: 2-3 Hours

Handle: 3-4 Hours

Sand/Recoat: 4-6 Hours

Full Dry/Cure: 7-10 Days

Special instructions: Induction Time: 45-60 Minutes Pot Life: 8 Hours @ 80°F, and 3 Hours @ 100°F.

WARNING: THIS PRODUCTS CONTAINS CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.
 Proposition 65 Warning

TECHNICAL SERVICE: Technical Services are available through Simpson Coatings Technical Service Support at 1-800-877-5997

LIMITED WARRANTY: The statements on this bulletin product label, or by any of our agents concerning these materials are given for information only. They are believed to be true and accurate and intended to provide a guide to approved construction practices and materials. As workmanship, weather, construction equipment, quality of other materials and other variables affecting results are all beyond our control. The Simpson Coatings Group does not make nor does it authorize any agent or representative to make any warranty of MERCHANTABILITY OR FITNESS for any purpose or any other warranty, guarantee or representation, expressed or implied, concerning this material except that it conforms to Simpson Coatings quality control standards. Any liability whatsoever of Simpson Coatings Group

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Solvents: Alcohol & Aromatic Hydrocarbons
Coatings V.O.C. Catalyzed: < 420 G/L

ANALYSIS

PRODUCT	ANALYSIS					PRODUCT COVERAGE				
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104-016 Deck Gray	37.5-38.1%	67.7-69.7%	53.0-55.0%	80+	88-96 KU	10.6-11.2	2.5-3.3 mils	5.0-6.0 mils	260-300 sq. ft.	300-350 sq. ft.
104-017 Jet Black	38.1-38.7%	65.7-67.7%	52.7-54.7%	80+	88-96 KU	9.80-10.4	2.5-3.3 mils	5.0-6.0 mils	260-300 sq. ft.	300-350 sq. ft.
104-018 Clear		53.0-55.0%	50.8-52.8%	80+	88-96 KU	7.5-8.1	2.5-3.3 mils	5.0-6.0 mils	260-300 sq. ft.	300-350 sq. ft.
104-019 Tile Red	42.5-43.1%	71.2-73.2%	55.7-57.7%	80+	88-96 KU	11.2-11.8	2.5-3.3 mils	5.0-6.0 mils	260-300 sq. ft.	300-350 sq. ft.

Dry times @ 77° F and 50% R.H.

Tack Free: 2-3 Hours

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