

Revolutionary products . . .

. . . for rebuilding, resurfacing and protecting all types of fluid flow machinery, equipment and structures.

CHEMCLAD[®] XC

CHEMCLAD[®] XC

Extraordinary
Chemical Resistance
Apply by Brush or Roller
Unlimited Shelf Life
100% Solids
Ultra High Performance

Outstanding protection in some of the most aggressive chemical environments.



CHEMCLAD[®] XC is a two component, 100% solids, ultra high performance, chemical resistant coating that provides unrivaled protection in some of the toughest chemical environments. CHEMCLAD[®] XC is resistant to a very broad range of organic and inorganic acids, alkalis, solvents, salts, hydrocarbons, etc. It is easily applied by brush or roller and can be used to protect all types of metal and cementitious surfaces. For your toughest chemical attack problems, use CHEMCLAD[®] XC.

The finest chemical protection polymer system available!
For machinery, equipment & structures.

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ENECON[®] Corporation
The Fluid Flow
Systems Specialists.

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Technical Data

Volume capacity per kg.	52 in ³ / 854 cc	
Mixed density	0.042 lbs per in ³ / 1.17 gm per cc	
Coverage rate per kg. @ 10-12 mils.	30 - 35 ft ² / 3 m ²	
Shelf life	Indefinite	
Volume solids	100%	
Mixing ratio	Base	Activator
By volume	1.4	1
By weight	5	3

Cure Times

Ambient Temperature	Working Life	Touch Dry	Maximum Overcoating	Full Cure
41°F 5°C	50 min	24 hrs	30 hrs	7 days
59°F 15°C	40 min	8 hrs	24 hrs	6 days
77°F 25°C	30 min	4 hrs	24 hrs	4 days
86°F 30°C	25 min	3 hrs	24 hrs	3 days

Physical Properties

	Typical Values		Test Method
Tensile Shear Adhesion			
Steel	2900 psi	203 kg/cm ²	ASTM D-1002
Aluminum	2400 psi	168 kg/cm ²	ASTM D-1002
Copper	2500 psi	175 kg/cm ²	ASTM D-1002
Stainless steel	2700 psi	189 kg/cm ²	ASTM D-1002

Elcometer Adhesion- to prepared cementitious surfaces primed with ENECLAD™ CFS is greater than the cohesive strength of the substrate.

ENECLAD™ CFS Technical Data

Theoretical coverage rate per kg. @ 3 mils. 125 ft² / 11.6²

Mixing ratio	Base	Activator	
-by volume	2	1	
-by weight	2.4	1	
Ambient Temperature	Pot Life	Minimum Overcoating	Maximum Overcoating
41°F 5°C	2 hrs	3 days	7 days
59°F 15°C	40 min	10 hrs	36 hrs
77°F 25°C	20 min	5 hrs	24 hrs
86°F 30°C	15 min	3 hrs	16 hrs

Chemical Resistance

Acetic acid (0-10%)	EX	Methyl alcohol	G
Acetic acid (10-20%)	G	Methyl ethyl ketone	G
Acetone	G	Naptha	EX
Aviation fuel (JP-4)	EX	Nitric acid (0-20%)	EX
Brake fluid	EX	Phenol	G
Butyl alcohol	EX	Phosphoric acid (0-50%)	EX
Calcium chloride	EX	Potassium chloride	EX
Carbon tetrachloride	G	Propyl alcohol	EX
Chloroform	G	Skydrol	EX
Crude oil	EX	Sodium chloride	EX
Diesel oil	EX	Sodium hydroxide	EX
Ethyl alcohol	EX	Sulfuric acid (0-20%)	EX
Gasoline	EX	Sulfuric acid (50%)	EX
Heptane	EX	Sulfuric acid (98%)	EX
Hydrochloric acid (0-20%)	EX	Toluene	EX
Kerosene	EX	Xylene	EX

EX - Suitable for most applications including immersion.
G - Suitable for intermittent contact, splashes, etc.

Your Local ENECON® Fluid Flow Systems Specialist

Using CHEMCLAD® XC

Surface Preparation - CHEMCLAD® XC should only be applied to clean, firm, dry, and well roughened surfaces.

1. Remove all loose material and surface contamination.
2. Depending on the surface, solvent and/or remove contamination by abrasive blasting, steam cleaning, pressure washing or other suitable means.
3. New concrete should be allowed to cure for a minimum of 28 days prior to treatment. Insure that all laitence is removed from cementitious surfaces before applying CHEMCLAD®.
4. After removing all surface and sub-surface contamination, flush the area as necessary and allow to dry completely.
5. Metallic surfaces which will be subject to immersion service should be abrasive blasted to achieve a "white metal" finish and a 3 mil profile.

Priming Concrete Surfaces - Prior to applying CHEMCLAD® XC to concrete and/or cementitious substrates, the surface should be treated with ENECLAD® CFS to seal the surface and insure optimum adhesion is obtained. After mixing, CFS should be applied using a brush or roller at the rate of 125 square feet (11 - 12 square meters) per kilogram to achieve the recommended film thickness of 3 mils. Please note: coverage will be reduced on excessively rough and/or porous surfaces. The application of the CHEMCLAD® XC may commence as soon as the applied CFS is touch dry and should be completed within 24 hours of Priming. For specific details concerning the use of the CFS, please refer to the appropriate section of the ENECLAD® CFS Tech Sheet.

Mixing & Application - CHEMCLAD® XC is supplied in pre - measured quantities to simplify mixing of full units. Simply pour the contents of the Activator container into the Base container; then, using a stirrer, or a paint mixer in an electric drill, mix thoroughly until a uniform, streak-free color is achieved. Apply the mixed CHEMCLAD® XC to the prepared (and/or Primed) surface using a brush, squeegee or roller. As a guide, a coverage rate of 30 - 35 square feet (3 square meters) per kilogram should result in an applied thickness of approximately 10 -12 mils on a relatively smooth surface. Please note: Shape, contour, porosity, roughness, etc. will affect the coverage obtainable. Since a minimum of two coats are recommended, CHEMCLAD® XC is available in three colors, light gray dark gray, and white to simplify over coating.

Health & Safety - Every effort is made to insure that ENECON® products are as simple and safe to use as possible. Normal industry standards and practices for housekeeping, cleanliness and personal protection should be observed. For further information and guidance, please refer to the detailed MATERIAL SAFETY DATA SHEETS (MSDS) supplied with the material and also available on request.

Cleaning Equipment - Wipe excess material from tools immediately. Use acetone, MEK, isopropyl alcohol or similar solvent as needed.

Technical Support - The ENECON® engineering team is always available to provide technical support and assistance. For guidance on difficult application procedures or for answers to simple questions, call your local ENECON® Fluid Flow Systems Specialist or the ENECON® Engineering Center.

All information contained herein is based on long term testing in our laboratories as well as practical field experience and is believed to be reliable and accurate. No condition or warranty is given covering the results from use of our products in any particular case, whether the purpose is disclosed or not, and we cannot accept liability if the desired results are not obtained.

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