

*Revolutionary products . . .*

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

CHEMCLAD® SC

# CHEMCLAD® SC

Outstanding  
Chemical Resistance  
Apply by Brush or Roller  
Unlimited Shelf Life  
100% Solids  
Simple To Use  
Durable

## Protects surfaces from chemical attack....

All types - Concrete, Rigid Plastics, Tile, Slate, Wood and Metal!

CHEMCLAD® SC - a two component, 100% solids, polymer system used for creating an outstanding corrosion and chemical resistant, protective coating on all types of equipment and structures.

CHEMCLAD® SC is simple to use. It mixes easily and can be applied by brush or roller. It is available in different colors to simplify overcoating. This self-leveling, high gloss coating yields a surface that's not only functional, but also aesthetically pleasing.



CHEMCLAD® SC provides extraordinary protection to machinery equipment and structures in some of the most severe industrial environments.

**Pipes • Tanks • Housings • Pedestals  
Floors • Containment Areas**

[www.enecon.com](http://www.enecon.com)

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The Fluid Flow  
Systems Specialists.

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## Technical Data

Volume capacity per kg.	48 in <sup>3</sup> / 781 cc	
Mixed density	0.044 lbs per in <sup>3</sup> / 1.28 gm per cc	
Coverage rate per kg. @ 6-7 mils.	50 - 55 ft <sup>2</sup> / 5 m <sup>2</sup>	
Shelf life	Indefinite	
Volume solids	100%	
Mixing ratio	Base	Activator
By volume	5	2
By weight	3.8	1

## Cure Times

Ambient Temperature	Working Life	Touch Dry	Maximum Overcoating	Full Cure
41°F 5°C	110 min	55 hrs	96 hrs	10 days
59°F 15°C	90 min	24 hrs	48 hrs	6 days
77°F 25°C	70 min	16 hrs	24 hrs	4 days
86°F 30°C	55 min	8 hrs	16 hrs	3 days

## Physical Properties

	Typical Values	Test Method
Tensile Shear Adhesion		
Steel	3700 psi 259 kg/cm <sup>2</sup>	ASTM D-1002
Aluminum	2700 psi 189 kg/cm <sup>2</sup>	ASTM D-1002
Copper	3000 psi 210 kg/cm <sup>2</sup>	ASTM D-1002
Stainless steel	3500 psi 245 kg/cm <sup>2</sup>	ASTM D-1002
Elcometer Adhesion- to prepared cementitious surfaces primed with CHEMCLAD CFS is greater than the cohesive strength of the substrate.		

## ENECLAD™ CFS Technical Data

Theoretical coverage rate per kg. @ 3 mils.	125 ft <sup>2</sup> / 11.6 <sup>2</sup>	
Mixing ratio	Base	Activator
-by volume	2	1
-by weight	2.4	1
Ambient Temperature	Pot Life	Minimum Overcoating
41°F 5°C	2 hrs	3 days
59°F 15°C	40 min	10 hrs
77°F 25°C	20 min	5 hrs
86°F 30°C	15 min	3 hrs
		Maximum Overcoating
		7 days
		36 hrs
		24 hrs
		16 hrs

## Chemical Resistance

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

EX - Suitable for most applications including immersion. G - Suitable for intermittent contact, splashes, etc. NR- Not recommended

Your Local ENECON® Fluid Flow Systems Specialist

# Using CHEMCLAD® SC

**Surface Preparation** - CHEMCLAD® SC 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 clean 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® SC 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® SC 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® SC 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® SC to the prepared (and/or primed) surface using a brush, squeegee or roller. As a guide, a coverage rate of 50 - 55 square feet (5 square meters) per kilogram should result in an applied thickness of approximately 6 - 7 mils on a relative surface.

Please note : Shape contour, porosity, roughness, etc. will affect the coverage obtainable. Since a minimum of two coats are recommended, CHEMCLAD® SC is available in five colors, gray, haze gray, white, safety yellow and tan, to simplify overcoating.

**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 of Equipment** - Wipe excess material from tools immediately. Use acetone, MEK, Isopropyl alcohol 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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