

Product Description: Water based, single component, unpigmented, styrene butadiene elastomeric polymer, with rust converting modifiers.

Basic Use: CORROSEAL® is recommended for use on rusted or partially rusted steel surfaces as a rust converter/paint primer, and as an etch-primer on aged tight paint of any color, and as sealer on some non ferrous metals Protects against future rusting. Can be used on welds. Eliminates need to mechanically blast to white metal.

Availability	CS-1 4ea 1 gallon containers, CS-5 5 gallon pail with pour spout CS-32 12 ea 1 quart, CS-52 52 gallon fiber drum
Appearance:	Milky, off-white to tan liquid.
Odor:	Very Mild.
Thinning:	Do Not Thin.
Coverage:	200 square feet per gallon @ 2.5 mil dry film thickness. 4.9 square meters per liter.
Spreading Rate	8-10 mils wet film thickness, 200-250 microns, to create optimum dry film thickness of 2.5 mils to 3.5 mils DFT (65 to 90 microns) to cover anchor profile.
Clean up	Soap and water for equipment, hands, clothes. Clean dry spatter with lacquer thinner.

PHYSICAL PROPERTIES

VOC (ASTM D 3960)	60 grams per Liter, 8 oz. per gallon
Non-volatile's by volume	31%
Non-volatile's by weight	35%
Weight per gallon(ASTM D 1475)	8.6 lbs., 3.91 Kg.
pH	3.0
Flash point (Closed Cup ASTM D 56)	>200°F, >93°C
Viscosity (Brookfield LVF#2 spindle,60 rpm)	300 cps
Heat Resistance	Resists heat aging up to 270°F. Useful properties up to 350°F.
UV Resistance (Mil-A-8625, BAC5022, ASTM G-23 Ultraviolet Testing)	1000 hours - No Fading (Corroseal® Primer and epoxy topcoat on 5 x 10 inch steel panel)
Degree of Rusting on Painted Steel Surfaces - ASTM D610	4224 hours - No rusting. Grade 10.
Cathodic Disbondment - ASTM D4541	Corroseal Primer applied to rusted steel and top coated with Wasser MoistureCure-CR-PW Average Pull Force at Failure 1128 psi.
Shelf life (ASTM D 1849)	Resists greater than 1 week at 140°F and up to or over one year between 38° F and 105° F, 3°C and 41° C. Avoid continuous direct sunlight. KEEP FROM FREEZING, Discard after freezing.
Dry time to (ASTM D 1640) (3 mils wet film - 76 microns)	Set to touch 3 minutes Cotton free 10 minutes Dry to touch 30 minutes Hard dry. 40 minutes Through-fingernail hard 60 minutes
Rejects rainwater @ 77°F, 25°C	No wash off 240 minutes
Recoat time @ 77°F, 25° C	Brush/Roller 15-30 minutes Spray 10-20 minutes or between set to touch and dry to touch (tacky).
Recommended top coat time	After 24 hours minimum, and 36 to 40 hours minimum in heavy applications and/or in cold weather, up to 30 days.®

Technical Service on suitability for specific applications and end-use requirements is available by contacting Corroseal Division 800-237-1573 (360) 678-1905, Fax (360) 678-1943 See web pages for Preparation and Application Specifications, Guides, MSDS, www.corroseal.com E-mail: Rust4me@corroseal.com ---
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SURFACE PREPARATION STANDARDS

- SSPC-SP 1 Solvent Cleaning - (Do not use hydrocarbon solvents)
- SSPC-SP 2 PWB C Sa 1 Hand Tool Cleaning
- SSPC-SP 3 Power Tool Cleaning
- SSPC-SP 7/NACE 4 Brush-Off Blast Cleaning
- SSPC-SP 12/NACE 5 Surface Preparation & Cleaning of Metals by Waterjetting Prior to Recoating
- SSPC-TU 4 Field Methods for Retrieval and Analysis of Soluble Salts on Substrates
- SSPC-VIS 2 Standard Method for Evaluating Degree of Rusting on Painted Steel Surfaces
- ASTM-D4285-83 Indicating Oil or Water in Compressed Air

Standards are available at www.sspc.org www.astm.org & www.nace.org

APPLICATION SPECIFICATIONS

APPLY ON STEEL rust and aged paint over an anchor profile where mill scale has been removed by any prior sandblasting or by ultra-high pressure water jetting:

- Clean surface with a degreaser with good rinsability (Simple Green) to remove oils, grease, fuels, salt, other chemicals, to SSPC-SP 1. Rinse off cleaner with fresh water. Do NOT use acetone and ordinary dish washing detergents as they leave behind a residue of sulfanic acids or other unknown chemicals which interfere with paint adhesion. Use Simple Green degreaser to also remove mineral salts as to SSPC-TU- 4.

(Sunshine Makers Inc., www.simplegreen.com)

- Remove loose flaking rust, weld slag, loose paint with power sanding tools, needle gun, descaler, wire brush, or water blast; to SSPC SP2, SP 3, SP7 or SP12.

- Air and steel temperature shall be between 45°F (4.5°C) and rising to 100°F (37.7°C) & falling.

Wait until morning dew is off the surface before coating. Do not apply within 4 hours of expected rain fall or fog. Prepared surface shall be eye-visible dry. Do not apply to sweating steel. CORROSEAL® will tolerate some moisture. However, this does not include running, dripping, or sweating steel.

- In enclosed compartments you must have two way air flow (ASTM Spec). Apply mechanical air movement of at least 10 to 20 atmosphere changes per hour. If temperature is low add heat.

- DO NOT THIN CORROSEAL®.

- Prepared surface shall have a neutral pH of 6-8 before CORROSEAL® application.

- Mix until color is uniform tan.

- Always prepare a test patch to ensure compatibility with substrate and follow-on coatings.

- Apply by synthetic bristle brush or short nap roller from a plastic or stainless pan.

Spray application can be by pot sprayer or airless sprayer using a 19 - 21 tip. Do not over mist during application. With air unit, work about 10" (25 cm) from surface with 6"-8" (15 to 25 cm) fan. Airless work depends on the equipment. Electrostatic works well.

- Apply 8-10 mil wet coat (203-254 micron) checking with wet film gage. This will appear as a thick white/gray film with no rust showing through. CORROSEAL® turns from white to black with rust conversion. 8-10 mil WFT produces 2.5-3 mil DFT to cover standard profile of the steel.

- There shall be no runs, sags, streaks, flashes, laps, pin holing or catering. Do not apply multiple coats of 8-10 mils WFT. Do not pattern or groove. Deep grooves from poor application will re-rust.

- If CORROSEAL® turns gray upon application, a 2nd light coat of CORROSEAL® needs to be applied to gray areas. Second coat, if needed to achieve correct 8-10 mil wet film thickness should be applied when first coat is still damp and tacky. There shall be no picking up or rolling up of the first coat during second application.

- See www.corroseal.com for Visual Application Guide in PDF format (VisGuide.pdf)

- Drying time is related to air circulation, temperature, film thickness, number of coats. At 77° F (25° C) CORROSEAL® should be dry to touch in 30 minutes.

- Do not pour unused CORROSEAL® from roller pan or air pot back into original container to avoid contamination.

- Clean up with soapy water and rinse well.

To Etch-Prime aged tight paint, new fiberglass, some aluminum:

- Always test for required adhesion to substrate and coating compatibility. • Remove contaminants from surface.

Small areas may be solvent-wiped with clean cloth. •Apply CORROSEAL® in 5 mil wet film thickness (127 micron). • If you abrade surface by SP 2, SP 3 or SP 7 to achieve 1-2 mil surface profile (25-51 micron) apply CORROSEAL® 6-8 mil wet (to 203 micron) to cover anchor profile with dry film. • Allow 2 hours drying, then topcoat within 30 days with any marine- grade coating compatible with CORROSEAL® Primer.

Cleanup

Normal clean up: Use detergent and cold water for equipment, hoses, hands, cleaning wet Corroseal® from clothing. Rinse with tap water. Use no mineral spirits. Dark stains clean up with 1:4 bleach to water. Use lacquer thinner to remove hard splatters.

Handling & Toxicity:

Refer to MSDS sheet for complete details. Corroseal® contains no chemicals listed in EPA 40 CFR cp 1, Part 433. If swallowed, induce vomiting. Corroseal® presents no significant vapor hazard but you should not breathe mist during spraying. Wear rubber gloves and protective glasses. In case of eye contact flush with plenty of water. Skin contact, clean with detergent and water. Allow empty container to air dry then dispose as waterborne latex container.

Limitations:**• DO NOT THIN.**

- Keep from freezing. •Apply between 45°F and rising and 100°F and falling (7°-37°C).
- Test on all zinc galvanized steel as some formulations do not accept Corroseal® converters. Refusal appears as transparent Corroseal® finish with unconverted rust areas clearly visible.
- Do NOT USE on zinc chromate or phosphates, lead, magnesium, copper powder, graphite, borate pigments, on most chromate.
- Chromate-treated prefabricated steel building cold rolled perlins and gutters shall remain dry until top coated.
- Cold rolled steel can require abrading to anchor profile and degrease.
- Do not use where in direct contact with food. May be used when top coated with an FDA approved topcoat. Check first with the top coat supplier to see if an extraction test is required.
- Waterborne topcoats can be subject to tannin staining and must be tested ± 48-60 hours before overall use. If stain through occurs apply oil based stain blocker over CORROSEAL® or apply oil-based topcoat. See Corroseal® label and topcoat manufacturer requirements.
- Always prepare a test patch to ensure compatibility with substrate and follow-on coatings.
- Refer to Material Safety Data Sheet (MSDS) and label for precautionary information.

Top coating Guide

- ON STEEL DO NOT TOP COAT BEFORE 24 HOURS - or rerusting may occur. 24 hour cure is required to complete the chemical conversion process within the rust.
- The surface shall be free from any contamination prior to applying subsequent top coat.
- CORROSEAL® bonds well with marine/industrial quality oil based enamel, urethane, moisture-cure polyurethane, epoxy, coal tar and most other oil based industrial/marine topcoats.
- Follow all intermediate/topcoat manufacturers specifications. Always apply a test patch to ensure compatibility.
- Do not thin intermediate or topcoats beyond manufacturers specification as excess solvent creates cohesive failure.
- Avoid tannin staining through water based topcoats by applying an oil-based stain blocker as an intermediate coat when top coating with a waterborne product. See "Limitations" for specific issues.

WARRANTY, LIMITATION OF REMEDIES AND LIABILITY:

MANUFACTURER WARRANTS THAT THE MATERIAL IS MADE OF THE CONSTITUENT PARTS DESCRIBED. THE MANUFACTURERS LIABILITY IS LIMITED TO THE REPLACEMENT OR REFUND OF PURCHASE PRICE UPON RETURN OF UNUSED PORTION FOUND TO BE DEFECTIVE AT TIME OF MANUFACTURE, WITH PROOF OF PURCHASE. THERE ARE NO GUARANTEES, EITHER EXPRESSED OR IMPLIED WHICH EXTEND BEYOND THE DESCRIPTION IN THIS PARAGRAPH. USER/APPLICATOR IS SOLELY RESPONSIBLE FOR DETERMINING WHETHER CORROSEAL® IS FIT FOR A PARTICULAR PURPOSE, IS SUITABLE FOR USERS APPLICATION AND FOR RESULTS OBTAINED OR DAMAGES INCURRED FROM PRODUCT USE BY BUYER OR APPLICATOR, WHETHER AS RECOMMENDED HEREIN OR OTHERWISE. DETERMINATION OF APPROPRIATENESS AND SUITABILITY FOR SPECIFIC APPLICATIONS IS THE SOLE RESPONSIBILITY OF THE BUYER AND APPLICATOR