

## PRODUCT INFORMATION



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## **Technical Data:**

**Description:** CitriSurf 2310 is a high quality blend of chemicals formulated for cleaning, rust removal and passivation of stainless steel products. It is provided in a high viscosity form for easy application on weld joints, vertical surfaces, and other large items or areas that cannot be conveniently dipped in a bath. CitriSurf 2310 is specifically designed to provide low cost and efficient removal of all rust and free iron from the surface of stainless steel and other metals, providing the highest chrome oxide levels possible.

## **Physical Properties:**

Specific Gravity 1.1

Approx. wt. /gallon 8.4 lb/gal

Viscosity Thixotropic Paste Form High Viscosity Liquid

Chemical Composition Citric acid, water, proprietary ingredients

Operating Temperature 70-170°F Flash Point None Water solubility 99%

Normal working concentration Use as received pH at working concentration approx. 2.0

**Packaging:** 1 gallon, 5 gallon, 55 gallon plastic containers, or 22 oz. trigger sprayer bottles.

**Application Procedure:** *CitriSurf* is an excellent cleaner by itself for many cleaning and passivation processes. However, to assure best results, the parts or areas to be passivated may be cleaned with an appropriate cleaning solution prior to treatment with *CitriSurf* solution, especially when heavy grease and oils are present. If thorough cleaning is not possible during use in the field, wipe the surface free of dirt and oils prior to application.

All equipment, mixers, applicators or pumps should be clean and dry prior to use. Only containers constructed of polypropylene, polyethylene, or other acid resistant plastic or stainless steel should be used to hold or store this product. *CitriSurf 2310* is intended for use without dilution, but if it is advantageous or necessary to slow down the reaction rate or lower the viscosity, it may be diluted with water at a maximum 1 to 1 ratio by volume.

**Prior to use, mix thoroughly by shaking or stirring.** CitriSurf 2310 should be applied liberally to the surface to be treated with a sprayer, brush or roller and left for a period sufficient to remove all free iron and contaminants from the surface. This is typically 10-30 minutes at room temperature, depending on the grade of stainless steel, hardness, and the condition of the surface. This should be determined by testing with your product. Coverage is approximately 250 square feet per gallon. If heavy rust needs to be removed, Scotch Brite (TM) or other non iron containing abrasive may be helpful. Difficult rust or corrosion must be tested to determine the exact best conditions for removal.

Note: CitriSurf 2310 must remain moist during the treatment period. When using CitriSurf 2310 in direct sunlight or other hot environments, it may be necessary to periodically mist or sprinkle the surface lightly with water to keep the CitriSurf from drying.

Rinse the surface thoroughly with clean water and dry completely in air immediately. Drying can be accelerated by use of a hot air blower (i.e. hair dryer), clean cloth, or other drying medium to attain a highly passive surface. Repeat process if needed to obtain desired results.

<u>Notes on Use</u>: Although *CitriSurf 3210* will not harm most metal appliances or surfaces, and will enhance the brightness when used as directed, test a small area before full application.

Although very safe in normal use, *CitriSurf 2310* is a citric acid based material, and as such it may cause irritation to exposed surfaces of the body. **See Material Safety Data Sheet before using this material.** Rubber or plastic gloves should be worn to apply the product to the surface or to wipe it dry. Inhaling mist may be irritating to nose and throat.

Do not apply *CitriSurf* to electrical wiring or other conductive material that is connected to electrical current without first turning off all electricity! *CitriSurf* is a water based conductive material. Serious injury or death can occur from electrical shock.

**Do not leave concrete or carbon steel exposed to** *CitriSurf* **for any period of time.** Damage to these materials will occur with prolonged exposure.

**Disposal:** Dispose of according to all federal, state and local regulations.

**Storage:** *CitriSurf 2310* should be stored at temperatures between 50°F and 120°F in 316 stainless steel or approved plastic containers (polyethylene or polypropylene). (If accidentally frozen, thawing will return product to normal.)

**Technical Services:** For technical assistance, please contact Stellar Solutions at (847) 854-2800.

**Standards:** CitriSurf 2210 meets all of the requirements of the ASTM A967, ASTM A380, ASTM B600, and AMS 2700 standards.

Testing of your products with *CitriSurf* before using in production is recommended. Every product and production facility is different, and requires testing to ensure that *CitriSurf* is compatible with the particular situation. No warranty is implied, or may be given in writing or verbally without the written permission of Stellar Solutions, Inc.