



PRODUCT INFORMATION



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Technical Data:

Description: *Weld Wizard 9003* is a high quality blend of chemicals formulated for use as the electrolyte in electropickling removal of weld heat discoloration and other scale.

Physical Properties:

Specific Gravity	1.04
Approx. wt. /gallon	8.7 lb/gal
Viscosity	2 cps
Form	Liquid
Chemical Composition	Citric acid, water, proprietary ingredients
Operating Temperature	Room temp or higher
Flash Point	None
Water solubility	Complete
Normal working concentration	Use as received
pH at working concentration	approx. 1.6

Packaging: 1 gallon containers.

Application Procedure: To assure best results, the parts to be treated should be thoroughly cleaned to remove dirt, oils, and grease with an appropriate cleaning solution prior to treatment with *Weld Wizard 9003* solution.

Use a commercially available electrochemical weld cleaning unit and follow the manufacture's directions, or configure a welder or other current source with a "wand" electrode that can be safely held. A flat stainless steel electrode works well, copper also works but will be slowly eroded. Wrap the exposed end of the wand completely in Scotchbrite™, fiberglass cloth or similar material. Clamp or otherwise attach the other electrode to the part being cleaned. Depending on the speed desired, the current can be set to 15-30 volts and 10 amps, AC or DC. If using DC, the negative (-) lead goes to the wand electrode and the positive (+) is clamped to the part.

If the unit operates with a built in reservoir, pour the *Weld Wizard 9003* in the unit and operate as directed. Otherwise, pour some *Weld Wizard 9003* into a small cup. Dip the wrapped end of the wand electrode into the solution to saturate the cloth. With the current turned on, place the soaked cloth on the weld area and gently move it over the surface until the weld discoloration is removed and the surface appearance is as desired. Avoid arcing of the electricity to the part caused by touching it with the bare electrode. Continue to dip the wand in the solution as necessary to keep it wet.

Rinse the surface thoroughly with clean water and dry completely in air or proceed with other treatments (e.g., passivation using *CitriSurf 2210*) to obtain the desired results. Drying can be accelerated by use of a hot air blower (i.e. hair dryer), clean cloth, or other drying medium. Repeat process if needed to obtain desired results.

CAUTION: Use proper care in handling electricity to prevent shock or injury. Rubber gloves and rubber soled shoes are recommended during use. Proper ventilation should be used to avoid breathing any vapors from the heated surface.

This can also be performed by immersion in a bath of *Weld Wizard 9003* using approximately 6 volts DC current. Attach the positive (+) lead to the part(s) and let the negative (-) lead hang free in the solution without touching anything. All electrically connected metal surfaces within the solution will experience electrochemical cleaning, though this may vary depending on part geometry and electrode positioning. Reposition the negative lead as needed for proper current flow. Discontinue when the desired appearance is achieved.

Notes on Use: Although very safe in normal use, *Weld Wizard 9003* is a citric acid based material, and as such it may cause irritation to exposed surfaces of the body. **See Safety Data Sheet before using this material.**

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

Storage: *Weld Wizard 9003* 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.

Testing of your products with *Weld Wizard* before using in production is recommended. Every product and production facility is different, and requires testing to ensure that *Weld Wizard* 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.

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