

# BONDERITE C-IC 79 AERO ACID CLEANER (KNOWN AS METALPREP 79)

**INTRODUCTION:**

BONDERITE C-IC 79 AERO (known as METALPREP 79) is a non-flammable multi-purpose phosphoric acid based cleaner and prepaint conditioner for most metals. BONDERITE C-IC 79 AERO cleaning and conditioning chemical leaves the surface chemically clean and corrosion free.

BONDERITE C-IC 79 AERO can be used to deep clean and etch a metal surface prior to paint or to prepare a surface for a subsequent chemical coating like that produced by BONDERITE on zinc and steel or BONDERITE M-CR 1201 AERO (known as ALODINE® 1201) on aluminum surfaces. Chemical coatings offer the best affordable substrate for both paint adhesion and under paint corrosion resistance.

**OPERATING SUMMARY:****Brush Application:**

For light oxidation and corrosion removal, dilute one part BONDERITE C-IC 79 AERO with two parts water.

For heavy oxidation and corrosion removal, dilute one part BONDERITE C-IC 79 AERO with one part water.

**Immersion Application:**

For each 100 parts of bath, add 25 parts BONDERITE C-IC 79 AERO to 75 parts of water.

**Spray Application using 62-G Applicator:**

Set dilution control on 3, allowing a mix of three parts water to one part BONDERITE C-IC 79 AERO.

**PROCESS:****To clean and condition metal:**

Step No. 1 - Apply the diluted BONDERITE C-IC 79 AERO

Step No. 2 - Allow the solution to react

Step No. 3 - Thoroughly rinse with water

Step No. 4 - Dry



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**To prepare the metal for a chemical coating:**

- Step No. 1 - Apply the diluted BONDERITE C-IC 79 AERO
- Step No. 2 - Allow the dilution to react
- Step No. 3 - Thoroughly rinse with water
- Step No. 4 - Apply coating chemical per product instructions
- Step No. 5 - Thoroughly rinse with water
- Step No. 6 - Dry

The work, after processing and drying, is ready to be painted.

**EQUIPMENT RECOMMENDATION:**

Acid-resisting (rubber, stainless steel, or plastic) buckets, troughs, or other suitable container should be used to hold the diluted BONDERITE C-IC 79 AERO cleaning and conditioning chemical solution. Ordinary steel pails may be used for a short period. Galvanized containers should not be used. If production conditions warrant, troughs may be installed to catch the BONDERITE C-IC 79 AERO cleaning and conditioning cleaner run-off for reuse.

Long-handled, window-type brushes, clean cloths, or synthetic sponges may be used to brush on the BONDERITE C-IC 79 AERO cleaning and conditioning solution.

**APPLICATION:**

Selecting the size area to be treated at one time will depend on method of application, condition on the metal surface, temperature, chemical dilution and part configuration. A typical treatment time is where BONDERITE C-IC 79 AERO is in contact with metal surface between one and two minutes. The BONDERITE C-IC 79 AERO should not be allowed to dry on the metal surface or permitted to reoxidize prior to a thorough rinse.

BONDERITE C-IC 79 AERO is normally applied at temperatures between room and 120° Fahrenheit. Enough temperature to clean within two minutes time without drying is optional. If drying does occur, rewet with the diluted BONDERITE C-IC 79 AERO, prior to water rinsing.

A thorough rinse with clean water is necessary to remove both residual BONDERITE C-IC 79 AERO cleaning and conditioning chemicals and oils that have been lifted from the metal surface.

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**POINTERS:**

Good results start with cleaning. A clean surface is a "water break-free surface". The rinse water sheets out over the metal surface where oil will cause water to bead up. Chemical cleaners will lift and break down oils on the surface of the metal and assist in rinsing them from the surface of the metal.

Corrosion is generally the result of a chemical battery reacting on the metal surface. In the presence of moisture, this corrosion can grow out over the metal surface. BONDERITE C-IC 79 AERO cleaning and conditioning chemicals attack the surface oxides and the corrosion battery. The result of this attack is either the corrosion battery being removed or deactivated.

Blushing or yellowing on steel is often seen when using BONDERITE C-IC 79 AERO solution. This chemical reaction is not injurious to quality, provided it is not rust or pits.

Blistering and corrosion problems are often the results of poor rinsing. Salts and soils trapped under a paint film eventually lead to problems.

To aid in the removal of heavy oxidation or corrosion, heating and/or applying the BONDERITE C-IC 79 AERO cleaning and conditioning chemical with an abrasive pad will shorten the treatment time. Scotch-brite pads are often used.

BONDERITE C-IC 79 AERO should not be used on a sand blasted part because rust will form instantaneously. The rust, then formed, is harmful to quality.

Paint soon after the work is dry in order to prevent soils or rust from contaminating the prepared metal surface.

To avoid streaks and patterns work from bottom to top.

**STORAGE REQUIREMENTS:**

BONDERITE C-IC 79 AERO cleaning and conditioning chemical will freeze at 14° Fahrenheit. It is recommended that the product be kept from freezing. However, should it freeze, simply thaw it in a warm place and stir it prior to use.

**BONDERITE C-IC 79 AERO  
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Applicable regulations covering disposal and discharge of chemicals should be consulted and followed. Disposal information for BONDERITE C-IC 79 AERO is given on the Henkel Material Safety Data Sheet for the product.

The processing bath is acidic and contains phosphates. Waste treatment and neutralization may be required prior to discharge to sewer.

**PRECAUTIONARY INFORMATION:**

Before handling the product, the first aid and handling recommendations found in the Material Safety Data Sheet should be read and followed.

The processing bath is acidic. Do not get in eyes, on skin or on clothing. In case of contact, follow the recommendations found in the Henkel Material Safety Data Sheet for BONDERITE C-IC 79 AERO.

**NOTICE:**

**The above information and recommendations concerning this product are based upon our laboratory tests and field use experience with this or similar products. However, since conditions of actual use are beyond our control, any recommendations or suggestions are made without warranty, express or implied. Manufacturer's and seller's sole obligation shall be to replace that portion of the product shown to be defective. Neither shall be liable for any loss, damage, or injury, direct or consequential, arising out of the use of this product.**

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