

5520 Copper-Nu™ Cleaner

For Copper and Copper Alloys

Product Description

Kester 5520 Copper-Nu Cleaner is a non-fuming liquid solution for removing oxides, sulfides, carbonates and other contamination, such as etch residues, from copper metal surfaces to facilitate soldering. This stable solution cleans by dissolving or solubilizing the contamination for easy removal by water rinsing. The chemical cleaning action is quite different from strong mineral acids which etch away valuable base metal and passivate the surface by insoluble film formation. 5520 contains a pink pH indicator which turns yellow at pH 3.5 indicating the solution has lost its efficiency. Because the etch rate is controlled, the bath life is very extended. 5520 will selectively remove surface contamination from copper or gold-plated surfaces with no appreciable metallic etching.

Performance Characteristics:

- Removes oxidation to facilitate soldering
- Easily cleaned in water
- Minimal etching

RoHS Compliance

This product meets the requirements of the Restriction of Hazardous Substances (RoHS) Directive, 2015/863 for the stated banned substances.

Physical Properties

Specific Gravity: 1.120 ± 0.010

Antoine Paar DMA 35 @ 25 °C

pH (10% solution): <1

Hanna Instruments 8314 @ 25 °C

Flash Point: >100 °C (212 °F)

Flux Application

Surfaces to be cleaned should be free of oil and grease. 5520 should be used as received in plastic or glass containers at room temperature or hot 49 to 60 °C (120 to 140 °F). Heating the solution accelerates the rate at which Copper Nu reacts with contaminants. Parts are immersed for 30 seconds to 3 minutes depending on the condition of the surface and then water rinsed to remove the solubilized contamination. Residual water-insoluble metallic complexes can be removed from an etched surface with minimal etching of the metal. Plating or etching residues can seriously affect the reliability of a soldered connection.

Cleaning

No neutralizer, saponifiers or detergents are necessary in the water wash system for complete removal of residues. It is not recommended to use high mineral content tap water. Otherwise, tap, deionized or softened water may be used for cleaning.

Storage, Handling and Shelf Life

Because this formulation is water based, it is subject to freezing. A minimum storage temperature of 4 °C (40 °F) is recommended. If frozen, the 5520 is easily reconstituted by stirring at room temperature. Shelf life is 2 years from date of manufacture when handled properly and held at 4 to 25 °C (40 to 77 °F).

Health and Safety

This product, during handling or use, may be hazardous to your health or the environment. Read the Safety Data Sheet and warning label before using this product. Safety Data Sheets are available at this [link](#).

Contact Information

To confirm this document is the most recent version, please contact Assembly@MacDermidAlpha.com

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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