

5520

Copper-Nu Metal Cleaner

For Copper and Copper Alloys

Product Description

Kester 5520 Copper-Nu 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. Kester 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. Kester 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

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)

Application Notes

Surfaces to be cleaned should be free of oil and grease. Kester 5520 should be used as received in plastic or glass containers at room temperature or hot 49-60°C (120-140°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 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 Kester 5520 is easily reconstituted by stirring at room temperature. Shelf life is 2 years from date of manufacture when handled properly and held at 4-25°C (40-77°F).

Health & Safety:

This product, during handling or use, may be hazardous to health or the environment. Read the Material Safety Data Sheet and warning label before using this product.

World Headquarters: 800 West Thorndale Avenue, Itasca, Illinois, 60143-1341 USA
Phone: (+1) 847-297-1600 • **Email:** customerservice@kester.com • **Website:** www.kester.com

Asia Pacific Headquarters
 500 Chai Chee Lane
 Singapore 469024
 (+65) 6449-1133
 customerservice@kester.com.sg

European Headquarters
 Zum Plom 5
 08541 Neuensalz
 Germany
 (+49) 3741 4233-0
 customerservice@kester-eu.com

Japanese Headquarters
 20-11 Yokokawa 2-Chome
 Sumida-Ku
 Tokyo 130-0003 Japan
 (+81) 3-3624-5351
 jpsales@kester.com.sg
