



TECHNICAL BULLETIN : GENERAL INFORMATION


Copper Surface Care and Use

NuAire products manufactured with copper have specific care and use instructions to assure maximum customer satisfaction. Copper is suited for common surfaces where contamination is a concern. Laboratory surfaces benefitting from copper are inherently any work surface that can harbor contamination. NuAire uses copper in many ways to produce a variety of products for the laboratory. Understanding the care and use of copper will maximize its benefit and visual appearance.

Copper surfaces may be cleaned with various laboratory surface disinfectants via different methods. For all surface disinfectants, follow application and use instructions provided by the manufacturer. Below is a list of surface disinfectant types and visual effect, along with their classification:

Surface Disinfectant Type	Classification	Visual Effect on Copper	
		Wipe Dry	Air Dry
Alcohols	Intermediate	No Effect	Slight Haze
Peroxides	Sterilant	Brightens	Slight Haze
Quaternary Ammoniums	Intermediate	No Effect	Slight Haze
Phenolics	Intermediate	Medium Haze	Darkens-Oxides
Iodophors	Intermediate	Medium Haze	Darkens
Glutaraldehyde	Sterilant	No Effect	Darkens
Hypochlorites	High Level	Darkens - Oxides	Darkens-Oxides

For routine intermediate cleaning, use of 70% IPA is most common by spray, 10 minute contact time and wipe dry. For cleaning with sterilant, the use of Hydrogen Peroxide (1% to 5% standard or blended) by spray, recommended contact time and wipe or air dry. It is preferable to wipe after contact time to avoid disinfectant droplet marks or haze on the copper surface.

 **Note:** Surface disinfectants that contain Halogens (i.e. Fluorine, chlorine, bromine, astatine) along with citric acid are not recommended as they cause discoloration.

Copper surface may be mechanically cleaned with mild abrasion. Using a mild abrasive pad (i.e. Red Scotchbrite®, type A VFN aluminum oxide), rub with the grain to desired brightness. Follow mechanical cleaning with routine surface cleaning as described above.

References:

CETA application guide for the use of surface decontaminates in Biosafety Cabinets. CAG-004-2007, CETA International, www.cetainternational.org