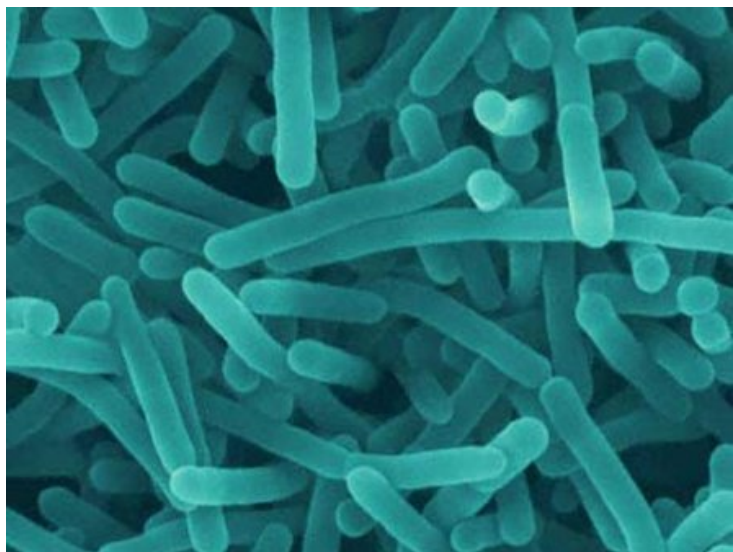


Copper prevents contamination in lifescience devices

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Copper prevents contamination in lifescience devices



Singapore: A recent study conducted at Porton Down, England, by the Centre for Applied Microbiology and Research (CAMR) has shown that copper piping in incubators reduces the growth of *Legionella pneumophila*, the causative agent of Legionnaire's Disease. This is the same testing facility that certifies many Thermo Scientific centrifuge rotors for bio-containment. In conjunction with the study, CAMR also documented that the Thermo Scientific Heracell ContraCon heat cycle in their CO2 incubators can effectively kill fungus and bacteria.

There are many examples of copper acting as a microcide in everyday products such as cooling systems and towers, where it is known to reduce bacteria and algae as well as copper-based pesticides that are known to control nematodes and fungi.

From an easy-to-clean design to external water reservoirs and heat decontamination cycles, Thermo Scientific Heracell CO2 incubators are proven to prevent and eliminate contamination. Thermo Scientific Heraeus CO2 incubators are available with interiors made from solid copper. Because the copper ions do not become airborne, they pose no threat to precious cells incubated in culture flasks on copper shelves.

Records from early civilizations demonstrate that copper can inhibit the growth of many different microorganisms. Reviews of modern literature indicate that copper slows or stops growth of many organisms, including bacteria, fungi, algae and yeast. Copper ions bind to contaminants and then disrupt key proteins and processes that are critical to microbial life.

Copper reduces microbes in a wide variety of equipment, including medical and scientific devices such as incubators. Years of experience show that copper wire, copper sulfate or even pennies added to water reservoirs of CO2 incubators significantly inhibit microbial growth. Moreover, solid copper surfaces clearly reduce the proliferation of contaminants.