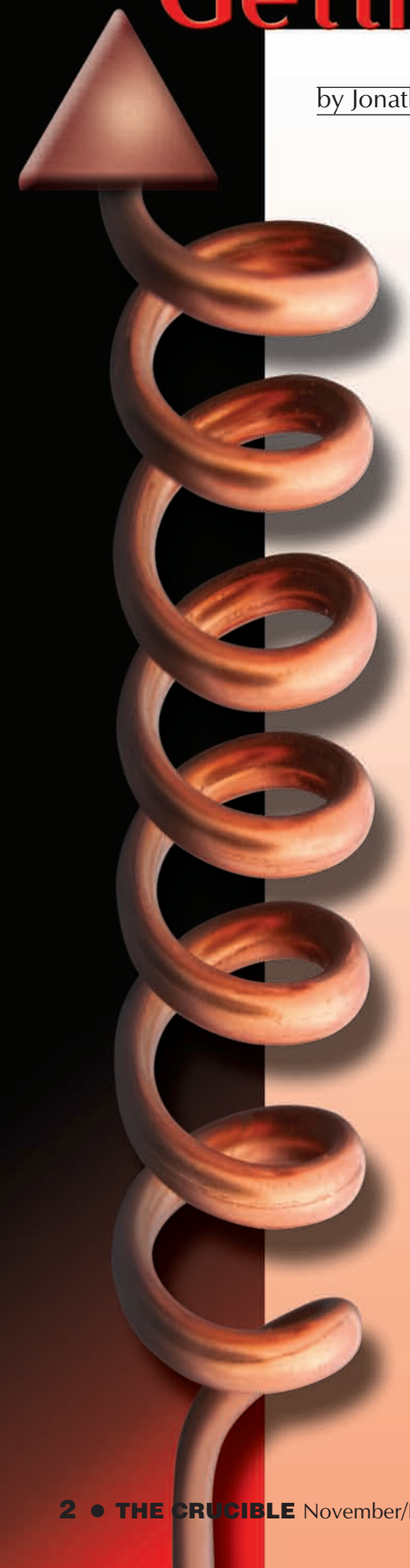
Getting the Red Metal

by Jonathan Gosberg, Principal, Gosberg Public Relations, LLC



Copper has played an important role throughout history in various applications. Prized for its durability, malleability and aesthetics, copper has been used to make tools, weapons, and jewelry since the Bronze Age. Today, copper is no less valuable, used extensively across almost every industry, including HVAC, architecture, and consumer electronics. That said, copper was hit hard by the economic downturn, with high prices negatively affecting demand and driving materials substitution. However, there was some extremely positive news for copper in 2008.

It is a well-known fact that copper is a natural antimicrobial. However, in 2008, the U.S. Environmental Protection Agency (EPA) made it official. In addition to its other performance properties, the EPA approved the registration of naturally antimicrobial copper alloys as a supplement to standard preventative measures in eliminating specific disease-causing bacteria.

This opens up a host of new market applications for the beleaguered metal. With the economic recovery beginning to take hold across key industries, now is the time to use this news to differentiate copper from other materials, targeting these industries to drive sales.

Copper Kills

Independent lab tests confirmed that copper alloys eliminate more than 99.9 percent of bacterial contamination within two hours of exposure. Copper, brass, and bronze products have proven particularly effective against Staphylococcus aureus, Enterobacter aerogenes, Methicillin-Resistant Staphylococcus aureus (MRSA), Escherichia coli O157:H7, and Pseudomonas aeruginosa.

What does this mean?

The EPA announcement makes copper alloys the first and only solid material approved as an antimicrobial. Copper alloys can be incorporated into manufactured goods and architectural surfaces as a natural bacteria fighting agent. Copper component suppliers and component manufacturers, as well as manufacturers, as well as end users can actually make the following public health claims, supported by concrete data (source: CDA website – www.copper.org):

- Antimicrobial copper, brass and bronze surfaces kill greater than 99.9% of bacteria within 2 hours of exposure.
- Antimicrobial copper, brass and bronze surfaces achieve continuous antibacterial action and remain effective in killing more that 99.9% of bacteria even after repeated contamination.
- Antimicrobial copper, brass and bronze surfaces remain effective in killing greater than 99.9% of bacteria within two hours, even after repeated wet and dry abrasion and re-contamination.
- Antimicrobial copper, brass and bronze surfaces help inhibit the buildup and growth of bacteria within two hours of exposure between routine cleanings.

In addition to these claims, the U.S. Department of Defense is currently conducting research at Fort Jackson, S.C., into EPA-approved antimicrobial copper components that can control the growth of organisms that grow in HVAC units, opening up yet another viable market.

Back Into the Black

New Market Applications

Architectural

No longer just another pretty facade, copper has been proven to benefit human health. Architects, engineers and designers can now incorporate copper into their designs from the onset, using the naturally antimicrobial metal on touch surfaces in public places, such as offices, schools, hospitals, and barracks to combat the spread of infection. Imagine doors, hallways, kitchens, and bathrooms – all designed to literally fight harmful bacteria.

Consumer Appliances

In addition to touch surfaces, there are other areas of a kitchen or bathroom where copper can deliver health benefits. In addition to the aesthetically pleasing look of copper alloys, already found in high-end cookware, copper can also be used in high-end kitchen appliances. Touch surfaces on blenders, microwaves, coffee makers and other kitchen appliances can benefit from the natural ability of copper to combat E coli., and other harmful microorganisms.

Heating, Ventilation & Air-conditioning (HVAC)

A multi-billion dollar market, HVAC systems are everywhere you look. Office buildings, hospitals, schools, nursing homes – everywhere that people congregate. There is huge potential for HVAC applications for copper in drip pans, drain lines, and ductwork – all areas of an HVAC system where moisture and bacteria thrive. Pending Department of Defense test results and subsequent EPA approval, the intrinsic antimicrobial properties of copper could help to eliminate bacteria and mold, providing human health benefits (i.e. spread of infection in office buildings, aka sick building syndrome).

The Future is Looking Bright

Looking toward future applications, testing has proven copper effective against harmful fungal and microbial organisms. In addition, U.S. Department of Defense-funded test trials are currently being run to determine the efficacy of copper in additional applications. Positive results will exponentially increase the usefulness of copper across several industries. It is now on copper suppliers and component manufacturers to step up and take this valuable information to drive the increased use of copper throughout target industries driving the red metal back into the black.

About the author:
Jonathan began Gosberg Public Relations, LLC in March 2009. His public relations background includes public affairs, corporate affairs, B2B, healthcare, and media relations. Prior to starting Gosberg Public Relations, Jonathan worked at Porter Novelli, Burson-Marsteller, and ABI, a mid-sized B2B marketing public relations firm. Jonathan has carried out public relations efforts for Luvata, The Dow Chemical Company, the Eastman Chemical Company, SiGNa Chemistry, and FS-Elliott.