



- Copper is a natural anti-microbial element and the only solid touch surface material registered by the EPA to continuously kill bacteria<sup>1</sup> that cause infections and pose a risk to human health.
- In the CuVerro® alloys registered with the EPA, copper is the active bacteria<sup>1</sup>-killing ingredient. Lab tests show 99.9% of bacteria<sup>1</sup> associated with disease and infection, including MRSA<sup>1</sup>, are killed within two hours when in contact with copper. Bacteria will continue to be killed 24 hours a day, week after week, between regular cleanings.
- Beyond EPA claims, clinical trials and research have shown copper alloys to be effective in a wider range of properties:
  - Additional tests have shown a “halo” effect with the alloy. i.e. non- copper surfaces such as wood adjacent to CuVerro® surfaces, have shown up to an 87% reduction in bio-burden.<sup>2</sup>
  - Studies on copper alloys containing greater than 70% copper demonstrate significant reduction in survival of C.diff. (Clostridium difficile) spores versus that of stainless steel. Complete death of spores occurred within 24 to 48 hours versus no significant death rate on stainless steel after 168 hours.<sup>3</sup>
- Other than Copper alloys, no other solid touch surface materials have been registered by the EPA for their antimicrobial properties. Copper is the only material that is EPA-registered as an anti-microbial solid surface material.
- Unlike coatings, the antimicrobial effectiveness of CuVerro® will not wear off over time. The antimicrobial properties of CuVerro® surfaces will not degrade from scuffs, scratches, regular cleaning or recommended use.
- Leading hospitals are involved in bio-burden studies funded by the DOD that are showing reduction in bioburden levels that approach reductions seen in laboratory settings. Pedigo will be participating future clinical trials.
- Studies monitoring bacteria<sup>1</sup> load on ICU surfaces in regularly cleaned rooms have shown that bed rails have the highest levels of bacteria<sup>1</sup> of all the surfaces sampled.<sup>4</sup> Rails made with CuVerro® significantly reduce risks associated with this bioload.
- Pedigo rails are designed to be easily and thoroughly cleaned. CuVerro® antimicrobial surfaces continue to kill bacteria<sup>1</sup> between normal cleanings offering additional protection.

**NOTE:**

**The use of copper alloy surfaces is a supplement to and not a substitute for standard infection control practices; users must continue to follow all current infection control practices, including those practices related to cleaning and disinfection of environmental surfaces.**

<sup>1</sup> CuVerro® alloys have proven effectiveness on MRSA (Methicillin-Resistant Staphylococcus aureus), Staphylococcus aureus, Enterobacter aerogenes, Pseudomonas aeruginosa, and Escherichia coli O157:H7. CuVerro is a registered trademark of GBC Metals LLC, d/b/a Olin Brass.

<sup>2</sup> Copper Surfaces Reduce Microbial Burden in Out-Patient Infectious Disease Practice

B E Hirsch, H Attaway, R Nadan, S Fairey, J Hardy, G Miller, S Rai, D Armellino, M Schilling, W Moran, P Sharpe, A Estelle, J H Michel, H T Michels, M G Schmidt - presented in a poster session at the Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) in Boston, MA, September 13 2010.

<sup>3</sup> Antimicrobial Efficacy of Copper Surfaces against Spores and Vegetative Cells of Clostridium difficile: the germination theory L. J. Wheeldon, T. Worthington, P. A. Lambert, A. C. Hilton, C. J. Lowden and T. S. J. Elliott, Journal of Antimicrobial Chemotherapy 2008 62(3):522-525; doi:10.1093/jac/dkn219.

<sup>4</sup> Microbial Burden of Objects in ICU Rooms C D Salgado, K A Sepkowitz, T Plaskett, J F John, J R Cantey, H H Attaway, L L Steed, H T Michels, M G Schmidt. October 2008.

<sup>4</sup> Effectiveness of Copper Contact Surfaces in Reducing the Microbial Burden (MB) in the Intensive Care Unit (ICU) of Hospital del Cobre, Calama, Chile V Prado, C Durán, M Crestto, A Gutierrez, P Sapiain, G Flores, H Fabres, C Tardito, M Schmidt. Poster 56.044, presented at the 14th International Conference on Infectious Diseases, Miami, March 11, 2010.