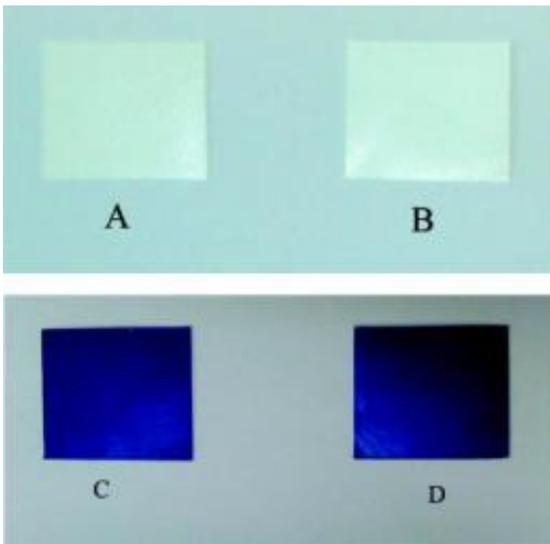


First broad spectrum anti-microbial paint to kill 'superbugs'

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A new antimicrobial paint could disinfect and decorate as it can kill harmful bacteria, fungi, mold and viruses. Credit: The American Chemical Society

Scientists in South Dakota are reporting development of the first broad-spectrum antimicrobial paint, a material that can simultaneously kill not just disease-causing bacteria but mold, fungi, and viruses.

Designed to both decorate and disinfect homes, businesses, and health-care settings, the paint is the most powerful to date, according to their new study. It appears in the current issue of the monthly ACS' *Applied Materials & Interfaces*. The paint shows special promise for fighting so-called "superbugs," antibiotic-resistant microbes that infect hospital

surfaces and cause an estimated 88,000 deaths annually in the United States, the researchers say.

In the study, Yuyu Sun and Zhengbing Cao note in the antimicrobial paints already on store shelves. These paints, however, are only effective against a narrow range of disease-causing microorganisms, limiting their usefulness.

The scientists already were aware of research on the germ-killing effects of that N-halamines, bleach-like substances already in wide use. They developed a new antimicrobial polymer that includes a type of N-halamine. It has no undesirable effects on the quality of latex paints. Laboratory tests showed that the new polymer kills a wide range of disease-causing microbes including those resistant to multiple antibiotics. The [paint](#) retains an anti-microbial punch for extended periods, and it can be easily "recharged" with a simple chlorination process, the researchers note.

Source: American Chemical Society ([news](#) : [web](#))

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