

Food Safety Magazine

Processing Aid Shows Promise at Pummeling Persistent Pathogens

By Staff



[PURE Bioscience, Inc.](#), creator of a patented silver dihydrogen citrate (SDC) antimicrobial, on Jan. 28 announced progress in its development of a SDC-based antimicrobial for direct food contact. The company is testing formulations to be used as a rinse or processing aid on produce, poultry, and meats.

PURE initiated this project in December 2013, and is working with James Marsden, a noted food safety scientist and expert at Kansas State University, on the testing and preparation of the submissions for authorization to the U.S. Food and Drug Administration (FDA) and the U.S. Department of Agriculture (USDA). A company press release stated that PURE expects to make the submissions early in the second quarter of 2014, and estimates that the authorization process could take up to six months.

Company officials note that in extensive testing in food processing plants and restaurants, PURE Hard Surface (an SDC-based disinfectant for food contact surfaces) has demonstrated exceptional effectiveness in breadth and speed of pathogen kill. The product also provides 24-hour residual kill and is non-toxic, according to the company. PURE officials said that in developing a direct food application, they expect that SDC could revolutionize the industry by proving to have superior efficacy to processing aids currently in the market.

A critical challenge for the food industry is the rising number of product recalls and foodborne illness outbreaks due to the presence of pathogens such as *Salmonella* and *E.coli*. In addition, increasing evidence suggests that these bacteria can build up a resistance to many of the antimicrobials currently used on food products.

PURE officials said that based on experience to date, bacteria have not been able to build up a resistance to the company's SDC formulation.

“Having an SDC-based direct food application that is more effective in the killing of pathogens that persist through the processing of produce, poultry and meats will greatly increase the value of the food safety solution that PURE is able to offer the food industry,” said Hank Lambert, CEO of PURE Bioscience. “We are excited that preliminary test results are encouraging in this regard.”