

# Bleach-containing foam disinfectant for safe and effective long-range applications

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## Technology description

### Summary

Healthcare workers who come into contact with infectious diseases rely on decontamination protocols to minimize their risk of disease exposure and contraction. The current procedure for decontamination of equipment and surfaces requires the application of concentrated bleach solutions, by either pouring or spraying. However, these solutions must be applied at a close range, ultimately putting personnel at risk of exposure. This technology minimizes these risks through use of a foam-based bleach for the long-range delivery of decontaminant. This technology can be applied to decontamination protocols for a number of disease exposures, including Ebola, SARS, and other infectious illnesses. This system could also be adapted for decontamination in other facilities such as laboratories, restaurants, or food-processing facilities, and can be expanded to dispense other materials, such as other cleaning products or fertilizers.

## **Bleach foam delivery system improves decontamination and enhances user safety**

This technology is a foam-based bleach formulation with a pressurized delivery system for the long-range delivery of bleach decontaminant. With this system, foam bleach can be applied uniformly to contaminated equipment, suits, and surfaces at a distance of over 6 feet, protecting users from possible exposures associated with decontamination procedures. Additionally, the foam bleach is designed to maintain stability for more than 10 minutes following application, to increase the likelihood of adequate decontamination.

The foam bleach formulation and long-range delivery system have been developed and tested in a laboratory setting.

## Application area

Long-range bleach delivery system for decontamination of health workers' suits in contact with dangerous diseases and viruses, including Ebola, SARS, etc.

Long-range bleach delivery system for decontamination of surfaces in facilities such as hospitals, laboratories, restaurants, or food-processing facilities

Foam-based household disinfectant and/or cleaning supplies

Foam-based system can be combined with chemicals other than bleach for long-range delivery of other materials, e.g. other decontaminants or fertilizer delivery

## Advantages

Applies bleach to surfaces uniformly

Can deliver foam from a distance of over 6 feet

Does not leave trace foam particles in the air during use

Minimizes risk of splashing associated with use of liquid decontaminants

Foam is stable for over 10 minutes after application

Can be applied to long-range delivery of other chemicals

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