



Bulletin Number: 1110

## USE AND RECOMMENDATION OF NON-ALCOHOL HAND SANITIZERS

Occasionally, the Research Department receives questions about whether or not non-alcohol hand sanitizers are “recommended” by the CDC, and if they work as well as alcohol-based hand sanitizers. One recommendation is found in the CDC’s brochure on **Steps to Fight the Flu**. They explain, “Though the scientific evidence is not as extensive as that on handwashing and alcohol-based sanitizers, other hand sanitizers that do not contain alcohol may be useful for killing flu germs on hands in settings where alcohol-based products are prohibited.” Buckeye believes that non-alcohol sanitizers perform just as well and, in some cases, are a better choice than traditional hand sanitizers.

Buckeye’s non-alcohol hand sanitizer is formulated using a quat (benzalkonium chloride) as the active ingredient. Research has shown that both alcohol and quats are very efficacious on a variety of microorganisms. Efficacy data for the Buckeye hand sanitizers can be found on Research Fact Sheets 508, 608, and 909.

One difference between alcohol and non-alcohol based sanitizer lies in the amount of test data that has been generated to date. Since non-alcohol sanitizers are newer to the market, less data has been generated. The active ingredient benzalkonium chloride, however, has been used for over 60 years. It is found in eye and nasal drops, skin antiseptics (Bactine), and hygiene wipes.

Many people seek guidance for using hand sanitizers from the CDC. The Center for Disease Control and Prevention is a recommending agency, not a regulating agency, such as the EPA. They examine data in the medical field, and then they suggest products to use or procedures to follow.

Some facilities that may exclude alcohol-based hand sanitizers include schools, prisons, rehabilitation centers, etc. Non-alcohol hand sanitizers remove the risk of flammability and the chance of accidental ingestion. They also have the advantage of not damaging floor finishes the way alcohol-based sanitizers can.

Non-alcohol hand sanitizers also benefit the skin by not removing essential skin oils that can be removed from frequent handwashing or use of some alcohol-based hand sanitizers. While washing your hands frequently to combat flu or diseases is recommended, it can lead to dry, damaged skin or contact dermatitis. An article in **Sanitary Maintenance** points out that, “...alcohol can sting already compromised (dried out or cracked) skin. And the CDC says that frequent use of alcohol-based formulations

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for hand antiseptics can cause drying of the skin unless emollients, humectants or other skin conditioning agents are added to the formulations.”

Hand sanitizers offer an option for hand hygiene when soap and water are not available. Always wash with soap and water after using a restroom, before handling food, and anytime the hands are visibly soiled.

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Supersedes: