

# KEEPER®

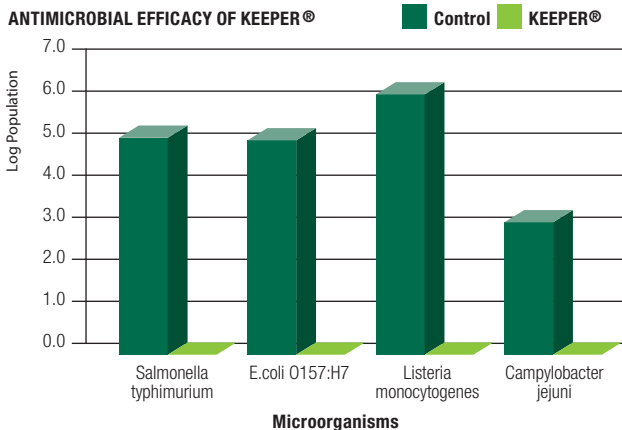
## The Ultimate Antimicrobial Product for the Post Harvest Processing Industry.



### Control microbial and enzymatic activity while promoting positive organoleptics and shelf life extension.

KEEPER® is an FDA approved [21 CFR 173.325] antimicrobial agent that is used to eliminate pathogens and extend shelf life in numerous post harvest fruit and vegetable applications. Per FDA's Letter of No Objection provided to Bio-Cide, KEEPER® is approved in water and ice that are used to rinse, wash, transport and store post harvest fruits and vegetables at concentrations below 500 ppm that are typically between 5-50 ppm.

- Meet the required efficacy without altering flavor
- Develop and maintain your reputation for quality products
- Gain confidence of USDA inspectors by using the most trusted antimicrobial intervention technology
- Integral component of your HACCP Plan
- Organic Certified



The KEEPER® antimicrobial intervention program is simple to use and is highly effective against Salmonella, E. coli O157:H7, Listeria and many other pathogens of concern. KEEPER® is trusted by inspectors as part of a successful HACCP Compliance program.

With Bio-Cide International's patented delivery technology, KEEPER® allows you to use the same chemistry from farm to fork.

KEEPER® was developed by Bio-Cide International, the world-wide leader in acidified sodium chlorite antimicrobial technologies. Bio-Cide's KEEPER® is activated at the time of use to produce the uniquely effective, food grade sanitizer, chlorine dioxide. Activated, KEEPER® is added during processing and transporting to wash or rinse water and ice. KEEPER® is the most effective, fast acting, broad-spectrum antimicrobial available.

### Use KEEPER® to Avoid Expensive Recalls.



Exceptional Chemistry • Extraordinary People  
 www.bio-cide.com • 2650 Venture Drive, Norman, OK 73069  
 405.329.5556 • 405.329.2681 fax • 800.323.1398  
 Bio-Cide International is ISO 9001:2008 certified

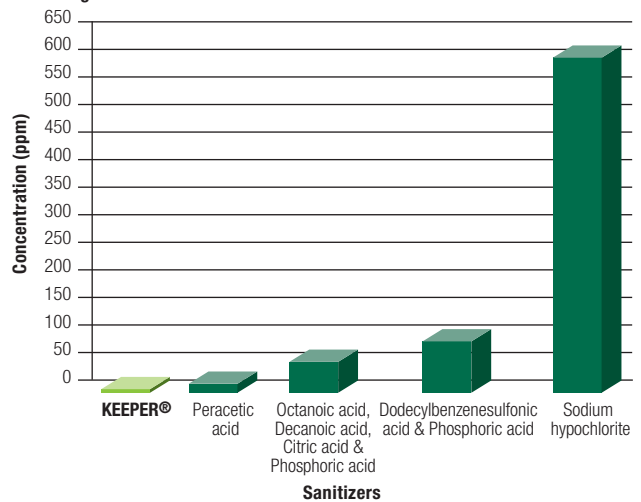
# KEEPER® is the most effective, fast acting, broad-spectrum antimicrobial available.

KEEPER® has been shown to be more effective than other common sanitizers including quaternary ammonia, Iodophors, Peracetic acid and sodium hypochlorite (chlorine). KEEPER® provides a comprehensive antimicrobial intervention program.

- Ultra high, broad spectrum antimicrobial activity
- Prevents formation of biofilm
- Low toxicity
- Low corrosion potential
- No chlorination or THM formation
- Effective over a broad pH range (1-10)
- FDA approved up to 1200 ppm as sodium chlorite
- FDA-Letter of No Objection for concentrations lower than 500 ppm
- Can be used in water and ice
- Resists neutralization due to organic load
- No effect on organoleptic properties
- No effect on nutritional quality
- Exempt from declaration on the food product label
- KOSHER certified
- Economical to use
- Can be used with automated delivery systems
- Organic certified



**CONCENTRATION OF SANITIZERS REQUIRED for >5 log reduction of E.coli O157:H7 in 60 seconds**



## Activation

The active ingredient in KEEPER® is Acidified Sodium Chlorite that generates Chlorine Dioxide. To increase the speed of kill and efficacy of KEEPER®, the pH of the solution can be reduced with any Food Grade GRAS acid to acidify the Sodium Chlorite.

Activation may be accomplished manually in low volume as batch applications; or with BCI's hands-free, low cost AANE™ unit (non-electric), the Wall Mount Activation System™, or the on-line activation system OLAS™ Ti that combines activation with injection into water streams on the fly.



**AANE™**



**Wall Mount Activation System™**



**OLAS™ Ti**