8820 Old Hwy 99 SE, Tumwater, Washington 98501, USA 360-943-6063 800-562-6184 FAX 360-352-4813 www.ch2o.com

Product Bulletin

FREEZE FRESH™15

ANTIMICROBIAL FOR THE SEAFOOD PROCESSING INDUSTRY

Effective Broad-Spectrum

Fast Acting

APPLICATION

FREEZE FRESH 15 is used in the seafood processing industry to control pathogens and to extend the shelf-life of product.

When activated with a GRAS acid to a pH of 2.5 to 2.9, **FREEZE FRESH 15** is approved for use as an antimicrobial agent in water and ice that are used to rinse, wash, thaw, and transport, or store seafood in accordance with 21 CFR 173.325 (d).

For other cleaning and sanitization requirements in the processing facility, such as holds, tanks, totes, food-handling surfaces, utensils, and other hard surfaces, we recommend using **SANI-PAC**, which is registered for these applications. **SANI-PAC** is used to make sanitizing rinses that are particularly effective in the control of bacterial slimes, which can harbor disease-causing organisms.

DIRECTIONS FOR USE

FREEZE FRESH 15 should be reacted with a GRAS acid such as **ACTIVATOR C** or **ACTIVATOR P**. This process is facilitated by use of CH_2O 's **ASC1** system.

When using one of CH₂O's **ASC** systems, **FREEZE FRESH 15** and the **ACTIVATOR** should be fed at the proper ratio to maintain the desired pH. The effluent from each process should be monitored, and controlled to yield a 40 to 50 ppm residual of acidified sodium chlorite.

WATERBORNE PATHOGENS

Legionella bacteria and other pathogens may be present in water systems. Application of a microbicide does not guarantee the absence of such pathogens, nor is it possible or reasonable to eliminate all risk of infection. Users should develop a comprehensive water management plan in accordance with ANSI/ASHRAE Standard 188, OSHA guidelines (OSHA Technical Manual Section III: Chapter 7), and other guidelines applicable to the specific facility/system. CH₂O, Inc. recommends that testing for legionella bacteria be incorporated in the facility's water management plan.

SAFETY & HANDLING PROCEDURE

Read the Safety Data Sheet for this product before handing and use. FREEZE FRESH 15 contains sodium chlorite, which is an oxidizing agent. Mixing this product with acids, alcohol, or other chemicals may cause the evolution of a hazardous gas mixture. Use only thoroughly cleaned utensils (transfer pump, storage container, etc.) when handling. Always make acidified solutions in a well ventilated area.

This product contains a chemical that is degraded by heat and exposure to UV light (sunlight). Product should be stored in a cool, dark area in its original container.

CONTROL

The acidified sodium chlorite residual of the use-solution should be between 40 and 50 ppm sodium chlorite, as tested on CH₂O total oxidant test.

Product residual testing is recommended to maintain proper control. Failure to monitor and maintain treatment levels can cause damage to product. In addition to monitoring and maintaining treatment levels, it is the customer's responsibility to ensure the product is fit for its intended application.

Use only with CH_2O operating equipment. A control test is necessary for individual applications to determine tolerance. Customer shall set treatment levels based on their control test results.

REGULATORY APPROVAL

FREEZE FRESH 15 is considered a food additive. As such, it is regulated by the FDA in the code of federal regulations title 21, 173.325 Acidified Sodium Chlorite Solutions.

PHYSICAL PROPERTIES

Appearance	Clear, Pale Green Liquid
	Mild, Ammonia-sulfide
Foam	None
Pounds per Gallon	9.1 – 9.6
	2.5 – 2.9

Seller Warranty

CH₂O brand test reagent refills are available through your sales representative at no charge. Customers are required to confirm product compatibility via a control test for their specific application. CH₂O recommends that you perform regular/daily testing to control chemical levels and cycles of concentration within established limits. Additional tests may be performed at your request. Test reports reflect conditions at the point when the analysis was performed. Results will change over time and with varying operating conditions.

Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose referred to in the product data sheet. Buyer is responsible to ensure that products and product dosages are appropriate for Buyer's particular application. Seller makes no other warranty or representation of any kind, express or implied, concerning the product, including NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE GOODS FOR ANY OTHER PARTICULAR PURPOSE. No such warranties shall be implied by law and no agent of seller is authorized to alter this warranty in any way except in writing with a specific reference to this warranty. The exclusive remedy against seller shall be a claim for damages not to exceed the purchase price of the product, without regard to whether such a claim is based upon breach of warranty or tort. Jurisdiction for any issues arising from or relating to this product shall be in the courts of the State of Washington and the venue shall be Thurston County. Any controversy or claim arising out of or relating to this contract, or breach thereof, shall be settled by arbitration in accordance with the rules and procedures as stated in RCW 7.06 and shall be binding upon both parties without right to appeal, and judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

Applies to all products sold by CH_2O , Inc., and is hereby communicated to all of its customers as a condition of sale. Use of CH_2O products is subject to the Standard Terms and Conditions as listed on CH_2O , Inc.'s website at: www.ch2o.com.



