

ALPHASAN®

FOOD-GRADE WATER DISINFECTANT



Water is one of the single biggest raw materials used in seafood processing, and its microbial quality is of the utmost importance to prevent contamination. Regardless of the source of water biofilms and bacterial infection can build up in water facilities and pipelines, leading to contaminated water and associated food hygiene problems which can cause foodborne diseases, resulting in product rejects and recalls, as well as having potentially devastating public health risks.

ALPHASAN is Chlorine Dioxide (ClO_2) gas in an aqueous solution. It is an exceptionally powerful, broad-spectrum, yet selective oxidiser and biocidal agent which is universally recognised as one of the most effective, safest, and environmentally harmless microbiocides available. This solution is used for a wide range of applications where effective control of microbial activity is essential – perfect for multiple applications in the fish and seafood industry.

- **WATER QUALITY MANAGEMENT** – Enhance the microbial quality of your water supply, & ensure complete protection from microbial pathogens, toxins & other contaminants.
- **WATER FACILITIES HYGIENE MANAGEMENT** - Disinfect pipelines & entire water facilities, controlling biofilm & slime build-up, as well as optimising flow and system efficiency.

ALPHASAN – The superior performance coupled with its unrivalled safety and environmental benefits makes it the ultimate solution for adding value and increasing consumer satisfaction by enhancing product quality and ensuring food safety, as well as ultimately protecting public health and company reputation.

WATER QUALITY = FOOD QUALITY

ALPHASAN - FEATURES & BENEFITS

This aqueous solution is versatile broad-spectrum and high-level bactericide, sporicide, virucide, fungicide and algaecide that has several important advantages over traditional high-risk sanitisers such as chlorine, hydrogen peroxide and sodium hypochlorite. ALPHASAN is not what is termed as “Stabilised Chlorine Dioxide”. This term is misleading as there is little or no ClO₂ in these so-called products.

Chlorine Dioxide is especially effective because it is impossible for bacteria and viruses to develop resistance to it. It has proven to be consistently reliable for the control of, but not limited to, the following pathogens:

<i>Campylobacter</i>	<i>Coryneforms</i>
<i>Clostridium</i>	<i>Cryptosporidium</i>
<i>Enterobacter</i>	<i>Giardia</i>
<i>E. coli</i>	<i>ISAV - Infectious Salmon Anaemia Virus</i>
<i>Flavobacterium</i>	<i>Lymphocystis</i>
<i>Legionella</i>	<i>Micrococcus</i>
<i>Listeria</i>	<i>Mycoses (Fish fungal diseases)</i>
<i>Mycobacterium</i>	<i>Norovirus</i>
<i>Pseudomonas</i>	<i>Saprolegnia (Oomycete)</i>
<i>Salmonella</i>	<i>Marine Biotoxins & Algae</i>
<i>Staphylococcus</i>	<i>Vibrio parahaemolyticus</i>
<i>Streptococcus</i>	<i>Viral Haemorrhagic Septicaemia Virus</i>

HIGH PERFORMANCE – Rapidly & consistently eliminates harmful pathogens & microorganisms, & has over 2.5 X the oxidising power of waterborne chlorine. It is proven to be consistently reliable & effective against bacteria, bacteria spores, viruses, protozoa, fungi, mildew & algae at up to 99.9999% (6-log reduction).

SAFETY – Non-hazardous, non-toxic & non-flammable. Completely safe to use.

ECONOMICAL – Its efficacy at low concentrations & short contact times means it is very economical in use, with low capital & operating costs. As a ready-to-dilute single pack solution it is easy to implement & monitor. It costs about the same as other sanitizers but is more versatile & beneficial to the environment.

ECO-FRIENDLY – Harmless to the environment & breaks down to salt (NaCl). It does not chlorinate or form any dangerous disinfection by-products, THM's or AOX's.

WATER STABILITY - Has high water solubility & remains a dissolved gas which stays active in water, enabling it to retain its effectiveness & penetrate all points in a system & kill microorganisms within the water as well as on any surfaces below the water – a unique trait to ClO₂ among disinfecting agents. It is also effective over a wide pH spectrum (pH4 – pH10).

NON-TAINTING – Does not adversely affect taste, smell or colour of food. Once diluted it is virtually tasteless & does not have the strong odour issues associated with chlorine or peracetic acid. It is also non-corrosive.

APPROVALS:

FSANZ (Food Standards Australia & New Zealand)

MPI - C43, C61 & C102

DWSNZ (New Zealand Drinking-water Standards)

ALPHASAN - TYPICAL APPLICATIONS

This solution is used wherever the highest standards of disinfection are required, and is widely used in the food and beverage processing industry for providing complete protection from harmful bacteria and other microbial pathogens. This versatile microbiocide is completely safe and is exceptionally effective without tainting or forming harmful disinfection by-products.

ALPHASAN is easily implemented into new or existing hygiene arrangements and systems via automatic dosing. Treated water is used for spraying, fogging or soaking, and is safely applied to all surfaces, as well as directly onto fish and seafood.

WATER TREATMENT

ALPHASAN Chlorine Dioxide is used for a variety of uses, including the disinfection of fresh and saltwater. At concentration levels accepted as safe for potable water (0.8ppm) it is still a highly effective virucide and bactericide, rapidly enhancing and sustainably maintaining the microbial quality of water used for washing, processing, preserving and storing food. The bacterial pressure is greatly reduced without having a negative effect on the biology and aquaculture in the water. Low residuals of potable water grade Chlorine Dioxide are enough to effectively kill pathogenic and spoilage microorganisms on the surface of oily fish and shellfish.

- **POTABLE WATER DISINFECTION** – Dose water supplies to sustainably improve the microbial quality of water, ensuring complete protection from microbial contaminants. Provides residual disinfection. Unlike chlorine, it is tasteless & does not taint, but enhances the taste & removes foul odours.
- **SALTWATER DISINFECTION** – Use in RSW Tanks & other aquacultural systems to decrease biological activity & cell counts in seawater. Unlike chlorine it does not react with seawater or create harmful compounds.
- **ICEMAKER WATER TREATMENT** – Inject into ice plant make-up water in ice-making plants (1L per ton of ice) to enhance the microbial quality of the water & add value by giving ice the ability to eliminate spoilage organisms on fish. The application of this treated ice is a simple & effective method for the safe preservation of raw fish by significantly lowering bacterial plate counts. The progressive release of ClO₂ gas to contact surfaces preserves fish for a significantly extended time, ensuring they are maintained in pristine condition & freshness. This enables fishing vessels to remain at sea for longer, as the condition of the first catch will remain as good as the last.

WATER FACILITIES TREATMENT

Due to its gaseous nature this solution has unrivalled coverage and penetration with optimal effect, reaching spaces and surfaces that other solutions simply cannot. When the ClO₂ gas is released it fills the entire space, permeating into every crevice and corner, ensuring complete protection.

- **WATER SYSTEMS DISINFECTION** – Disinfect entire water systems to ensure complete protection from microbial pathogens & other contaminants.
- **BIOFILM CONTROL** – Highly effective for eliminating biofilms, preventing formation in water pipelines, icemakers (optimising the freezing efficiency of freezer plates) & food-lines, to maximise flow & system efficiency.

ALPHASAN®

Our technological advances have made it possible for us to produce a consistent 1000ppm aqueous solution of ClO₂ which has a 6-month shelf-life and is sold in various container sizes. With our experienced Chemists we are ready to assist you in every aspect of the evaluation, design, implementation and long-term support of your Chlorine dioxide disinfection solutions.

Pack sizes: 1L Bottles, 10L Containers, 60L Drums, 200L Drums & 1000L IBCs

ALPHASAN is a registered disinfectant, manufactured in New Zealand by:

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As the actual conditions of use and storage are out of our control, no liability is accepted for any loss or damage caused directly or indirectly through the use of our products. Intending users should satisfy themselves as to the suitability of this product for any particular purpose, by carrying out appropriate tests. USE DISINFECTANTS SAFELY. ALWAYS READ THE LABEL AND SDS BEFORE USE. ALPHASAN® IS A REGISTERED TRADEMARK. ALL RIGHTS RESERVED.