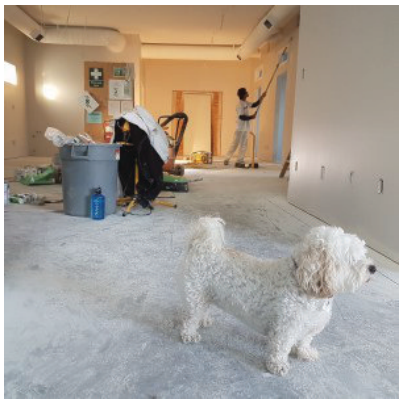
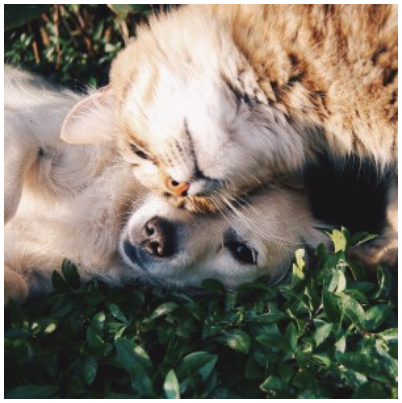
GARD D'AIRE

the magic of oxidation

deodourise & disinfect





AQUA+5 family

your indoor health companion

The magic of oxidation for indoor environment

Aqua^{+}5 is a family of safe and effective disinfectant deodourizer specially formulated for indoor environment. Our workplaces and homes are vulnerable to pathogenic bacteriological infection and odour generated from biological or chemical sources, such as mold, building materials and new furniture. A 24/7 around the clock control program is required to prevent the continuous dispersal of disease causing microbial or chemical odour.

Aqua^{+}5 uses a state-of-the-art technology to generate chlorine dioxide, when use resulting in the most advanced chemical characteristics in controlling microbial growth. This gives it the highest anti-microbial activity than any other disinfectant available in the market. Aqua^{+}5 is totally safe to be applied in indoor environment , health care, pet centre, public transports, show suites and any living or working spaces. It's proven effective against a broad spectrum of microbial and is especially suited for the removal and subsequent control of biofilm. It works immediately on contact, and remains working until dried. No residual active compound is left behind so no rinsing is required.

Features of Aqua^{+}5:

* Safe & easy to use
* Negligible toxicity at use concentration
* Point of contact microbial control
* US EPA & US FDA registered active ingredient
* Does not cover odours; it eliminates the source of the odour through a process that destroys organisms and volatile chemicals at the origin
* PH independent can be used in combination with other cleansing agents (such as detergent), without chemical reaction.
* Does not contain perfumes, masking agents or alcohol
* Biodegradable and environmentally friendly
* No harmful chemical residue
* No rinsing required
* Easy to apply

total solution for indoor health

Aqua^{+}5 INSTITUTION PACK

Aqua^{+}5 is the most powerful and effective disinfectant specially formulated for indoor environment. Institutions such as old age homes, kindergartens and rehabilitation facilities are vulnerable to outbreak of pathogenic bacteriological infection such as influenza, norovirus, food & mouth disease, MRSA, etc. A 24/7 around the clock disinfection program is required to prevent the continuous dispersal of disease causing microbial. With its High Antimicrobial Activity and True Board Spectrum Antimicrobial, Aqua^{+}5 has the most advanced chemical characteristics in controlling microbial growth.

Stabilized chlorine dioxide used to be technically difficult to ship and use because of its aqueous form. NOW, with over 12 years of R&D, our rigorously field–tested patented and patent pending(s) products have taken a foothold in the commercial and retail market.

AquaGaz

AquaGaz uses a state-of-the-art, biodegradable sponge packet that just needs water to be activated. AquaGaz destroys odours at the source. Just open the package, add water, place the packet in the water, close up the space and walk away! When you return you will have an odour-free space. AquaGaz has done the impossible, make gaseous chlorine dioxide available and easy to use for the consumer, homeowner, or anyone with an odour dilemma with safe, easy-to-use, odour elimination and disinfection products.

AquaSan

AquaSan is an all-purpose safe and effective disinfectant deodorizer for surfaces. It eliminates microbial quickly and easily by harnessing the power of aqueous chlorine dioxide to kill germs, bacteria, viruses, mold and mildew by attacking the microbial through oxidation. AquaSan comes in an easy to use, pre-formulated pouch to eliminate odour at its source. Can be used in almost surfaces, such as concrete, tile, glass, vinyl, plastic, fiberglass, wood, painted surfaces, fabrics, and more. If using on fabrics, always do a colorfast test in an inconspicuous area.

FIELDS OF APPLICATION

- health care facilities
- nursery, playground & kindergarten
- old-aged homes, rehabilitation centres
- hotels & hostels
- veterinary clinics & animal complexes
- public toilets
- school buses & public transports
- poultry and animal farms
- hydroponic & aquaponic farming
- real estates & show suites

Regulatory Approvals In Place for Chlorine Dioxide in North America

US Environmental Protection Agency (EPA)

1. EPA bactericidal and fungicidal approval for hard non-porous surfaces in hospitals, laboratories and medical environments.
2. EPA bactericidal and fungicidal approval for instruments in hospital and dental environments.
3. EPA bactericidal approval as a dental pumice disinfectant.
4. EPA approval for a terminal sanitizing rinse for food contact surfaces in food processing plants, such as poultry, fish, meat and in restaurants, dairies, bottling plants and breweries.
5. EPA approval for disinfection of environmental surfaces such as floor, walls and ceilings in food processing plants, such as poultry, fish, meat, and in restaurants, dairies bottling plants and breweries.
6. EPA approval for a sanitizing rinse of uncut, unpeeled fruits and vegetables, at 5 ppm followed by a potable with rinse.
7. EPA approval for disinfection of water systems found aboard aircraft, boats, mobile vehicles, offshore drilling rigs, etc.
8. EPA approval for treatment of stored potable water, at 5ppm for drinking water.
9. EPA approval for general disinfection and deodourization of animal confinement buildings, such as poultry, swine, barns and kennels.
10. EPA approval for the disinfection and deodourization of ventilation systems and air conditioning ductwork.

US Food and Drug Agency (FDA)

1. Final ruling on FDA in direct food additive petition, published August 12, 1987, listing chlorine dioxide in 21 CFR 178.1010, as an approved compound in food processing plants for all food contact surfaces.

US Department of Agriculture (USDA)

1. P-1 approval for bacterial and mold control in federally inspected meat and poultry processing plants for environmental, surfaces.
2. D-2 approval as terminal sanitizing rinse not requiring a water flush on all food contact surfaces found in food processing plants.

Comparison of Aqua^{+}5 and other common disinfectants/deodourizer

	Efficacy	Microbial Range	Contact Time	Concentration	pH	Corrosiveness	Toxicity	Biodegradable	Other applications
Aqua^{+}5	High	Broad spectrum effective against all bacteria, viruses, mold, fungi and algae, including spore-formers like Giardia and Cryptosporidium	Few seconds to few minutes	0.1 ppm - 100 ppm	Neutral	Negligible at use concentration	Negligible at use concentration. Prolonged exposure to high concentration can produce skin and respiratory irritation	High for reactive chemicals and typical byproducts	Drinking and wastewater disinfection, deodourization and chemical oxidation
Sodium hypochlorite/ calcium hypochlorite	Moderate	Relative ineffective against most viruses, molds, fungi and spore-formers	Usually minutes to hours	1000 ppm to % range	Alkaline	Corrosive to iron and aluminum products	Alkaline compounded products are highly corrosive to tissues. They may produce chlorinated by-products such as chloroform, etc.	Moderate for bleach itself. Low for chlorinated by-products	Deodourizer and wastewater treatment. Restricted applications in drinking water sanitation.
ozone	High	Broad spectrum effective against all types of microorganisms, including spore-forming types	Seconds to minutes	0.1 ppm - 10 ppm	Neutral	May be marginally corrosive to iron and some grades of stainless steel at higher concentrations	Probably negligible at use concentrations	High	Primarily used for drinking water and wastewater. Disinfection with some chemical oxidation applications
phenol	High	Effective against most microorganisms except certain spore-formers such as Giardia	Minutes to an hour or more depending on target organisms	100 ppm to % range	Mildly acidic to neutral	Higher concentrations tend to be more acidic and cause corrosive to iron and certain grades of stainless steel	Extremely toxic. Chronic exposure can lead to kidney, liver and neurological damage. Highly regulated by OSHA	Relatively Low	Use limited to surface sanitizers and as an active ingredient in sanitize lubricant formulation

Contact us @
Calcite International (Canada) Inc.
info@calcitegroup.com
1-604-998 4880 Canada & USA
852-6624 8441 Hong Kong & China