Product Name: INSTANT BIOXIDE™
Manufacturer: Watch Water Germany

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Application Scope:

Bactericide: Staphylocide, pseudomacide, salmonellacide
Fungicide: Aspergillocide, trychophytonicide

Hazard Statements:

H315: Causes skin irritation
H318: Causes serious eye damage
H305: May be harmful if swallowed and enters airways

READ THE LABEL AND LEAFLET BEFORE USING

Caution:

BIOXIDE™ is a non-corrosive germicide for cleaning and disinfection of agricultural buildings such as dairy barns, horse barns, piggeries, poultry houses, shelter sheds and other types of livestock buildings. Also for use in veterinary hospitals and food processing plants.

Description

BIOXIDE™ is a disinfectant, possessing wide spectrum virucidal (Table 2), bactericidal (Table 3) and fungicidal (Table 4) activity. **BIOXIDE™** is unique in its composition. Its activity is based on a buffered synergized acid peroxygen system containing a high percentage of surfactant. **BIOXIDE™** can be used on all surfaces and in all situations. Once diluted in a 1% solution, **BIOXIDE™** is of low toxicity, non-tainting, and non-irritant. Because of its high detergency and mode of action, **BIOXIDE™** can be used in an exceptional variety of situations for effective cleaning and virucidal disinfection in a single operation. **BIOXIDE™** can be applied manually or through all types of cleaning and spraying equipment. Readily soluble in lukewarm water giving a clear solution.

Detergent Sanitizer

BIOXIDE™ passes the AOAC germicidal and detergent sanitizer test at a concentration of 0.5% (1:200).

Directions For Use

BIOXIDE™ Disinfectant/Cleaner
In agricultural buildings: animals must be removed from the premise during disinfection.
In food processing plants: for food contact surfaces, rinse thoroughly with potable water after disinfection.

General purpose Cleaning & Disinfection of Surfaces and Equipments

In agricultural buildings

Remove all animals from premises. Remove all litter and manure from floors, walls, and other surfaces of barns and equipment. Brush and blow dust from fans, motors, louvers and electrical equipment. For terminal cleaning and disinfection, saturate all surfaces with a 1% w/v solution of **BIOXIDE™**, using a pressure washer or a fogger. **BIOXIDE™** should remain in contact with the surface to be disinfected

for at least 10 minutes. Scrub heavily soiled utensils and soak in a 1% w/v solution of **BIOXIDE™** for 10 minutes (do not exceed 30 minutes for metal objects).

In veterinary hospitals

Remove heavy soil deposits then thoroughly wet surfaces to be disinfected with a 1% w/v solution of **BIOXIDE™**, using a mop, sponge or cloth, as well as by spraying. A minimum contact time of 10 minutes is required. For laboratory equipment and bowls, scrub heavily soiled utensils and soak in a 1% w/v solution of **BIOXIDE™** for a minimum of 10 minutes (do not exceed 30 minutes for metal objects).

> **IMPORTANT NOTE:** In animal premises where there has been a disease outbreak and/or the mortality/morbidity rates are higher than normal and the causative agent has been determined by a pathology laboratory to be one of those listed in **Table 1**, the contact time/dilution rate indicated should be used.

In food processing plants

Remove all debris and other deposits from surfaces. Then, thoroughly wet surfaces to be disinfected with a 1% w/v solution of **BIOXIDE™**, using a mop, sponge or cloth, as well as by spraying. A minimum contact time of 10 minutes is required. For food contact surfaces, rinse thoroughly with potable water after treatment with **BIOXIDE™**.
*For a complete listing of microorganisms against which **BIOXIDE™** is effective, refer to the Efficacy Table 2, 3 and 4.*

Sanitization of Drinking Water Systems

For sanitizing drinking water system at terminal clean out, use a 1.0% w/v solution of **BIOXIDE™**. Dose header tank and drain system. Wait at least *10 minutes* before draining again.

DILUTION INSTRUCTIONS

BIOXIDE™ Amount for different Dilution Strengths

Solution Volume	Solution Strength				
	0.2%	0.5%	1%	2%	3%
5 liters	10 g	25 g	50 g	100 g	150 g
50 liters	100 g	250 g	500 g	1.0 kg	1.5 kg
100 liters	200 g	500 g	1.0 kg	2.0 kg	3.0 kg
250 liters	500 g	1.25 kg	2.5 kg	5.0 kg	7.5 kg

***Stability:** Prepared solution is best effective for 30 days. There is a 20% loss of activity of 1% solutions of **BIOXIDE™** after 14 days in 350 ppm hard water.*

- Select the quantity of disinfectant solution required.
- Choose appropriate dilution rate.
- Measure out the amount of **BIOXIDE™** indicated using the graduated measuring scoop provided.
- Add **BIOXIDE™** to warm water and stir.

Health and Safety Measures

Fire Hazard:

Non-flammable

Precautions:

- Keep out of reach of children.
- Powder irritating to eyes, skin and mucous membranes.
- May be harmful if swallowed or inhaled.
- Do not get powder in eyes.
- Avoid contact of powder with skin.
- Handle in such a way as to minimize dust release.
- Do not mix with other chemicals. When mixing the solution, wear goggles, chemical-resistant gloves, and a mask.
- It is recommended that workers wear overalls, goggles and a mask when applying **BIOXIDE™** solution with a hand-held fogger or a pressure washer.

Disposal:

- Rinse the emptied container thoroughly and add the rinsing to treatment site.
- Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- Make the empty container unsuitable for further use.
- Dispose of the container in accordance with provincial requirements.
- For information on the disposal of unused, unwanted product and the cleanup of spills, contact the Provincial Regulatory Agency or the Manufacturer.

First Aid Measures:

Eyes: Irrigate with plenty of water.

Skin: When in powder, remove contaminated clothing. Wash with soap and water. Not hazardous when in solution.

Ingestion: When in powder, wash mouth with plenty of water. Drink plenty of water. Do not induce vomiting. Seek medical advice. If in solution, rinse mouth out with water.

Inhalation: When in powder, if symptoms of coughing, choking, wheezing are troublesome, remove to fresh air and seek medical advice.

Storage:

Store between 15°C and 25°C in a dry place in tightly sealed containers.

Packaging:

- 20 kg box (20 x 1 kg/pouch)
- 20 kg box (4 x 5 kg/bag)
- 60 kg Drum

Table 1:

Microorganisms for which a dilution rate of BIOXIDE™ >1% w/v or a contact time >10 minutes are required.

Microorganism	Effective Dilution of BIOXIDE™	Contact Time Required (minutes)	Test Method
Aspergillus fumigatus	3%	10	AOAC Fungicidal Test
Bovine Papilloma Virus	1%	30	VLA, UK Method
Dermatophilus congolensis	2%	10	AOAC Use Dilution Test
Fusarium moniloforme	2%	10	AOAC*
PRRS Virus	0.5%	30	VLA, UK Method
Salmonella enteritidis	2%	10	AOAC Use Dilution Test
Trichophyton mentagrophytes	2%	10	AOAC*

* Modification of AOAC Fungicidal Test

Table 2:

Viruses for which a 1% w/v dilution rate of BIOXIDE™ and a contact time of 10 minutes are known to be effective.

Viruses	Effective Dilution of BIOXIDE™	Contact time required (minutes)	Test method
Avian Infectious Bronchitis Virus	1%	10	AOAC*
Avian Influenza Virus	1%	10	AOAC*
Avian Laryngotracheitis Virus	1%	10	AOAC*
Bovine Adenovirus Type 4	1%	10	EPA Method
Bovine Viral Diarrhea (BVD) Pestivirus	1%	10	EPA Method
Calf Rotavirus	1%	10	EPA Method
Canine Parvovirus	1%	10	EPA Method
Duck Adenovirus	1%	10	EPA Method
Equine Arteritis Virus	1%	10	EPA Method
Equine Herpes Virus Type 1	1%	10	EPA Method
Equine Herpes Virus Type 3	1%	10	EPA Method
Equine Influenza Virus Type A	1%	10	EPA Method
Feline Calicivirus	1%	10	EPA Method
Feline Panleukopenia Virus	1%	10	EPA Method
Feline Rhinotracheitis Virus	1%	10	EPA Method
Infectious Bovine Rhinotracheitis Virus	1%	10	EPA Method
Infectious Bronchitis Virus	1%	10	AOAC*
Infectious Bursal Disease (Gumboro) Virus	1%	10	AOAC*
Infectious Canine Hepatitis Adenovirus	1%	10	EPA Method
Newcastle Disease Virus	1%	10	AOAC*
Parainfluenza Virus	1%	10	EPA Method
Parvovirus	1%	10	EPA Method
Pseudorabies Virus	1%	10	EPA Method
Simian Virus 40 (SV40)	1%	10	EPA Method
TGE-Coronavirus	1%	10	EPA Method
Turkey Herpes Virus	1%	10	EPA Method

* Modification of the AOAC Germicidal Spray Test

Table 3:

Bacteria for which a 1% w/v dilution rate of BIOXIDE™ and a contact time of 10 minutes are known to be effective.

Bacteria	Effective dilution of BIOXIDE™	Contact time required (minutes)	Test method
Actinobacillus pleuropneumoniae	1%	10	AOAC*
Bordetella avium (Alcaligenes faecalis)	1%	10	AOAC Use Dilution Test
Bordetella bronchiseptica	1%	10	AOAC Use Dilution Test
Brucella abortus	1%	10	AOAC Use Dilution Test
Helicobacter pylori (Campylobacter pyloridis)	1%	10	AOAC Use Dilution Test
Campylobacter jejuni	1%	10	AOAC*
Chlamydia psittaci	1%	10	EPA Method
Erysipelothrix rhusiopathiae	1%	10	AOAC Use Dilution Test
Escherichia coli	1%	10	AOAC Use Dilution Test
Haemophilus somnus	1%	10	AOAC Use Dilution Test
Klebsiella pneumoniae	1%	10	AOAC Use Dilution Test
Listeria monocytogenes	1%	10	AOAC Use Dilution Test
Moraxella bovis	1%	10	AOAC Use Dilution Test
Mycoplasma gallisepticum	1%	10	AOAC Use Dilution Test
Pasteurella hemolytica	1%	10	AOAC Use Dilution Test
Pasteurella multocida	1%	10	AOAC Use Dilution Test
Pseudomonas aeruginosa	1%	10	AOAC Use Dilution Test
Salmonella choleraesuis	1%	10	AOAC Use Dilution Test
Salmonella typhimurium	1%	10	AOAC Use Dilution Test
Serpulina (Treponema) hyodysenteriae	1%	10	AOAC Use Dilution Test
Shigella sonnei	1%	10	AOAC Use Dilution Test
Staphylococcus aureus	1%	10	AOAC Use Dilution Test
Staphylococcus epidermidis	1%	10	AOAC Use Dilution Test
Streptococcus equi	1%	10	AOAC Use Dilution Test
Streptococcus suis	1%	10	AOAC Use Dilution Test
Haemophilus (Taylorella) equigenitali	1%	10	AOAC Use Dilution Test

*Modification of the AOAC Use Dilution Test

Table 4:

Fungi for which a maximum 1% w/v dilution rate of BIOXIDE™ and a contact time of 10 minutes are known to be effective.

Fungi	Effective dilution of BIOXIDE™	Contact time required (minutes)	Test method
Candida albicans	1%	10	AOAC Use Dilution Test
Microsporum canis	0.5%	10	MHW Guideline, Japan
Trichophyton verrucosum	0.5%	10	MHW Guideline, Japan

* Modification of AOAC Fungicidal Test