

# A Newest Method Of Hygiene Management Weakly Acid Hypochlorous Acid Water Generator

Bring peace of mind to our lives

Harmless to people and environment

Hygiene management with hypochlorous acid water



## **Properly Guard PG-3.0**

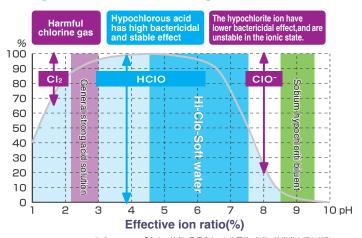
Product name		Propery Gard
Model		PG-3.0
Size	••••	W230×H310×D190mm
Weight		About 3.5 kg
Available water amount	••••	About 4.5 L/min

pH value	 5.0 ~ 7.0	
Effective concentration	 10 ∼ 50ppm	
Operation mode	 Continuous operation mode	
Additive solution container	 1.5 L tank	



## High sterilization power, Safety, Low cost

## **High sterilization power**

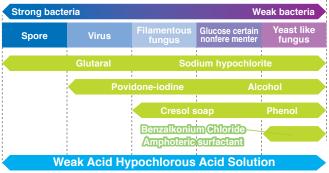


Reference to 「浄水の技術」丹保憲仁・小笠原紘-共著 技術堂出版(1985)

#### Proportion of available chlorine in changes in pH values

By changing the pH value from modicum to weak acid the disinfectant has a strong sterilization

#### Antimicrobial Spectrum of Representative Disinfectants



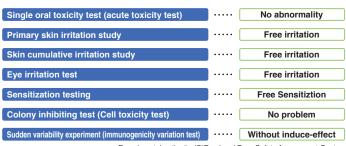
OSG Investigation

#### Disinfectant force 80 times (theoretical value)

the main component contains a large amount of hypochloric acid, which is 80 times more fungicidal than the example of hypochlorite

## **Safety**

#### **Animal Safety Study Report**



Experimental authority:(C)Food and Drug Safety Assessment Center

1ml Aerobic plate count Experimental bacteria Initial microbial content After 5min After 1min After 3min <10 <10 <10  $1.9 \times 10^{6}$ E.coli  $1.9 \times 10^{6}$ <10 <10 <10  $1.9 \times 10^{6}$  $9.5 \times 10^{5}$ <10 <10 <10  $1.0 \times 10^{6}$ Staphylococcus <10 <10 <10  $1.0 \times 10^{6}$ aureus  $8.2 \times 10^{5}$  $1.0 \times 10^{6}$ < 10 < 10  $1.0 \times 10^{6}$ <10 vibrio  $1.0 \times 10^{6}$ <10 <10 < 10 parahaemolyticus  $1.0 \times 10^{6}$  $6.5 \times 10^{5}$ <10 <10 <10  $1.4 \times 10^{6}$ Bacillus <10 <10 <10  $1.4 \times 10^{6}$ pyocyaneus  $8.3 \times 10^{5}$  $1.4 \times 10^{\circ}$ <10 <10 <10  $1.9 \times 10^{5}$ streptococcus  $1.9 \times 10^{5}$ <10 <10 <10  $1.9 \times 10^{5}$  $3.4 \times 10^{-1}$ 

Experimental	1ml Aerobic plate count			
bacteria	Initial microbial content	After 1min	After 3min	After 5min
Bacillus cereus	$1.6 \times 10^{5}$	$1.1 \times 10^{2}$	<10	<10
	$1.6 \times 10^{5}$	$2.0 \times 10^{5}$	$1.5 \times 10^{5}$	$7.4 \times 10^4$
	$1.6 \times 10^{5}$	_	_	$2.0 \times 10^{5}$
Bacillus subtilis	$4.3 \times 10^{5}$	$3.0 \times 10^{5}$	$2.0 \times 10^{3}$	<10
	$4.3 \times 10^{5}$	$4.1 \times 10^{5}$	$4.2 \times 10^{5}$	$3.8 \times 10^{5}$
	$4.3 \times 10^{5}$	<del>-</del>	_	$4.4 \times 10^{5}$
Candida albicans	$2.1 \times 10^{6}$	<10	<10	<10
	$2.1 \times 10^{6}$	$2.5 \times 10^{3}$	<10	<10
	$2.1 \times 10^{6}$	_	_	$3.2 \times 10^{6}$
Aspergillus niger	$1.1 \times 10^{5}$	$7.5 \times 10^{3}$	$3.4 \times 10^{3}$	$4.4 \times 10^{2}$
	$1.1 \times 10^{5}$	$1.7 \times 10^{5}$	$1.4 \times 10^{5}$	$5.8 \times 10^4$
	$1.1 \times 10^{5}$	_	_	$1.8 \times 10^{5}$

Hypochloric acid	Residual chlorine 50ppm pH6.0			
Sodium hypochlorite	Effective concentration 200ppm			
Normal saline				

Initial microbial content: Bacteria before exposure to various disinfectants

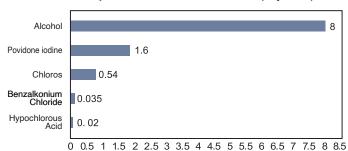
<10 : below testable limits

- : not tested

Experimental authority:(C)Food and Drug Safety Center Hatano Research Institute

### Low cost

#### Cost comparison of various disinfectants(in yuan/L)



Manufactured by OSG Corporation Co., Ltd.

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