

# **Effective Disinfection**

## Cleaner and Healthfer Environment

#### Disinfect safely with slightly acidic electrolyzed water

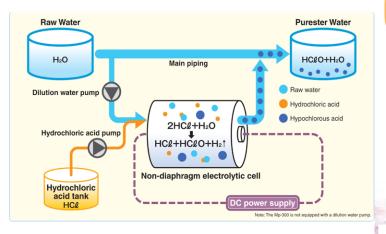
The slightly acidic hypochlorous acid water generated by Purester is a crucially safe disinfectant. Being officially designated as a bactericide for food materials, Purester water can be used for washing food materials, and does not pose risks to workers. Its bactericidal power is high against food poisoning microbes, and it is used as rinsing water after washing in a wide range of applications in vaious fields.



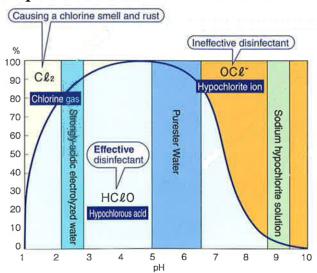
#### Purester concept

Purester water is generated by mixing raw water with slightly acidic hypochlorous acid. Its character is similar to tap water that is colorless, tasteless and odorless. The hypochlorous acid is an effective compound, occuring in the suitable pH range of 4-7, which has available chlorine concentration between 10-30 ppm. By this Purester unit, all types of portable water can be used as a source. Purester water has a bactericidal effect on variety of microbes such as bacteria, mold, yeast, spores and virus.

#### Purester production flow



#### Equilibrium chart on chlorine in water



Purester Water: available chlorine 10 - 30 ppm, pH 4.0 - 7.0

The amount of hypochlorous acid HCLO determines the disinfection efficacy.

#### **Features**

- Purester Water is a bactericide for food materials designated by the Ministry of Health, Labour and Welfare in Japan. The application of Pureter Water directly onto food materials is officially approved.
- All types of potable water can be used as a source to obtain Purester water.
- There is no problem in touching or even swallowing Purester Water.
- Purester Water has a wide range of applications, including food, diary, beverage factories, medical facilities, rest homes, restaurants, hotels, fishery, agriculture, etc.
- Various systems for different capacity demands. The compact model MP300 generates 300 liters of Purester Water per hour. A model MP10000 which generates 10,000 liters per hour is also available, satisfying the large demands of beverage and brewing industries.





#### Aerosia Interpac Co.,Ltd.

For more information, call (66) 0 2434 5999 (auto) Email: enq@aerosia.com http//:www.aerosia.com

# PURESTER

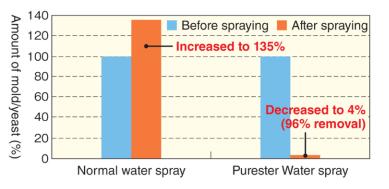


### Evaluation of bactericidal activity against spores

**Applications** 

# 40°C 10<sup>7</sup> 10<sup>6</sup> 10<sup>5</sup> 10<sup>7</sup> urester Water, 10 ppm urester Water, 20 ppm Time (minutes)

#### Effect of spraying Purester water on mold and yeast



#### Effect on food poisoning bacteria

Microbe	Bacterial count before treatment (CFU/10 µL)	Bacterial count after treatment (CFU/10 μL)
E. coli	5,2×10 <sup>8</sup>	<1
Salmonella enterica	2.1×10 <sup>8</sup>	<1
Staphylococcus aureus	1.8×10 <sup>8</sup>	<1
Pseudomonas aeruginosa	3.7×10 <sup>8</sup>	<1
Vibrio parahaemolyticus	3,1×10 <sup>7</sup>	<1
Aspergillus niger	1,0×10²	<1
Yeast	8,8×10²	<1

Available chlorine concentration: 10 ppm pH: 6.0 Trealment time: 1 minute

Japan Food Research Laboratories Issue;October 17.2002 Report No.102071681-001

Trealment temperature: 20°C

Virus	Before treatment (TCID <sub>50</sub> /mL)	After treatment (TCIDso/mL)
Influenza virus	1.4×10 <sup>6</sup>	<40
Feline calicivirus(FCV)	1.0×10 <sup>6</sup>	<40

Available chlorine concentration: 10 ppm

The active component "HCLO" has a bactericidal effect towards microorganisms causing food poisoning.

#### Washing Food materials









#### Washing manufacturing equipments





#### Washing processing room





### Advantages

- Colorless, tasteless and odorless
- Powerful disinfection
- Insignificant residual clorine after use
- Minimum amount of trihalomethane (THM)

- Officially approved for using in food contact applications (USDA, US FDA, MHLW Japan)
- Low operating cost
- Safe and easy to use
- No negative impact on workers
- Reduce chemicals usage
- Various models for different capacity demands and wide range of applications