Purogene®

The Ultimate Antimicrobial Product for Airline Water Storage and Tank Disinfection



Purogene[®] is the most effective, fast acting, broad-spectrum antimicrobial available.

Purogene[®] is a highly refined blend of oxychloro species containing purified sodium chlorite. When activated, chlorine dioxide is produced, greatly enhancing Purogene[®]'s antimicrobial activity. Purogene[®] displays broad spectrum antimicrobial activity, proven effective against *E. Coli* 0157:H7, Salmonella, Listeria, Staphylococcus, Aspergillus, and Pseudomonas, Legionella among others. This product is especially suited for the removal and subsequent control of biofilm.





Purogene[®] has been shown to be more effective than other common sanitizers including quaternary ammonia, lodophors, Peracetic acid and sodium hypochlorite (chlorine). Purogene[®] provides a comprehensive antimicrobial intervention program. Purogene[®] has major advantages in providing long term residual antimicrobial effect over Ozone and Peroxide based products that are short-lived in systems with organic load.

Distributed by:



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B E N E F I T S

- Ultra high, broad spectrum antimicrobial activity
- · Uniquely effective against biofilm
- Effective over a broad pH range (1-10)
- Low corrosion potential at use concentrations
- Does not chlorinate (no THM formation)
- Long lasting bacteriostatic activity
- No effect on organoleptic properties
- Economical to use
- Extends the life of on-board water heating and coffee making equipment
- Maintains lavatory systems free of sludge and organic build-up
- · Can be used with automated delivery systems
- Approved for use by most major airframe manufacturers

DIRECTIONS

WATER TANK DISINFECTION

- 1) Drain water storage tank.
- 2) Inspect tank for foreign materials and sediment.
- 3) Clean out and flush tank with clean potable water.
- 4) For each 50 gallons of disinfection solution, mix the following:
 - 16 fluid ounces of Purogene®
 - 2 ounces of citric acid
 - mix and allow 5 minutes for activation to occur
 - Dilute activated concentrate with two gallons of clean potable water.
- 5) Fill aircraft water tank
- 6) Open all water discharge ports for a short time to allow the treatment solution to reach and flow through these ports.
- 7) Close ports and allow treatment solution to stand for one hour.
- 8) Drain solution from tank. DO NOT FLUSH TANK.
- 9) Refill tank with potable water treated with 5ppm Purogene®.
- This procedure can be automated using BCI's delivery systems (see below)

CALCULATION CHART

Packaging	Purogene	Citric Acid	Volume Treated	<u>CIO, ppm</u>
1 Quart	32oz	4 oz	50 Gallons	100 ⁻ ppm
1 Gallon	128 oz	16 oz	200 Gallons	100 ppm
12 Quart Case	3 Gallons	48 oz	600 Gallons	100 ppm
4 Gallon Case	4 Gallons	64 oz	800 Gallons	100 ppm
5 Gallon Pail	5 Gallons	80 oz	1000 Gallons	100 ppm

PRODUCT SPECIFICATIONS

- Concentration: 2.0 2.10% available chlorine dioxide
- Appearance: Colorless liquid
- pH Concentrate: of 8.2 8.5
- Boiling point: 213° F (100.5°C)
- Melting point: n/a
- Freezing point: 28.9° F (-1.72°C)
- Vapor Pressure: 23.7 mm Hg (25°C)
- Vapor Density: 0.02 kg/m3
- Specific Gravity: 1.03 g/ml (20°C)
- Volatiles (by volume): 97% water
- Solubility in water: Complete
- Evaporation rate: Comparable to water
- Very low acute toxicity (EPA Cat III)
- Non-Flammable
 Non-Explosive
 Stable Solution
- NFPA Rating: Fire: 0 Health: 1 Reactivity: 1 Special: None



These systems provide hands-free activation and dosing of Purogene®. Three configurations of the PASS System are available:

- 1. Potable Water Treatment This unit combines Purogene® and activator at the appropriate ratio for potable water treatment (5 ppm)
- 2. Water Tank Disinfection This unit combines Purogene® and activator at the appropriate ratio for water tank disinfection (50 100ppm)







Dual Concentration with external valve

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