

biosan P-max



Background

Biosan P max is a new product offering from Genesis Biosciences.

The product takes the form of specially selected lightweight particles impregnated with natural biocidal active ingredients. It offers real anti-microbial performance and longevity and its active ingredients are compliant with the Biocidal Products Directive 98/8/EC.

Development

Biosan P max was developed though combining existing vapour release technology with a blend of natural biocidal compounds and biodegradable materials to give a highly effective, long lasting and eco-friendly feminine waste unit sanitizer.

Environmental Features:

Biodegradability

Biosan P max are made from ingredients which are commonly recognized as being biodegradable:

The active ingredients in Biosan P max product are a Natural blend of biocides derived from extracts of plants belonging to the Lauraceae and Myrtaceae families.

Safety:

The sachets are Safe to use and can be easily disposed of, with no corrosive or hazardous labels, reducing risk to operators and customers.

Disposal:

Unlike the use of liquid disinfectants which generate large volumes of heavy, wet waste requiring disposal. Vapour producing 'dry disinfectants' such as the Biosan P max remove the spill risk and reduce the volume of waste requiring disposal.

Packaging

Recyclable or re-usable packaging is used in the manufacture of the Biosan P max product.

Manufacturing

The product is made using low energy processes, using recycled materials where possible to minimise the impact of the product manufacturing on the environment.

Regulatory

The active ingredients in Biosan P max are compliant with the Biocidal Products Directive 98/8/EC.

Performance features:

- The Specially selected lightweight carrier clings to the liner to give maximum coverage in the unit
- Works via vapour action to disinfect and sanitize the sanitary waste unit. The anti-microbial vapours permeate the whole unit, and as such so, are effective even when the unit is full.
- The highly absorbent nature of the Biosan P max carrier allows for excellent retention and slow release of active ingredients through vapour action, making the card effective throughout the length of the service cycle and will last up to 6 weeks.
- The Natural Fragrance is fresh and long lasting. It has been proven to counteract odours in both an accelerated laboratory malodour testing and field trials.

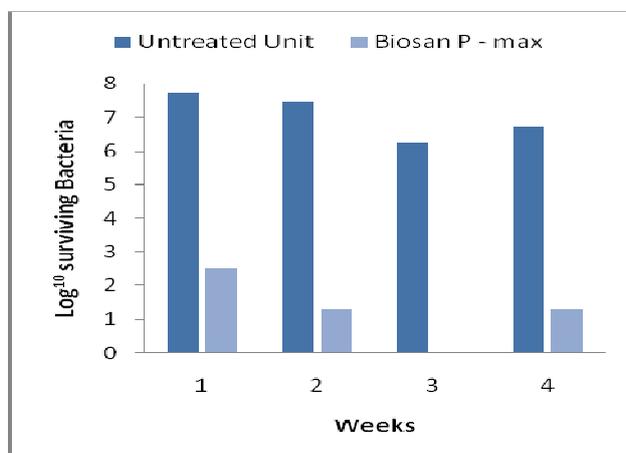
- The active ingredients have been verified by independent testing to be effective against HIV, Hep B and Hep C.
- The Natural plant extract present in Biosan P max is also a recognised to be anti-fungal agent and insecticide [1]
 1. Cheng SS, Liu JY, Tsai KH, Chen WJ, Chang ST (July 2004). "Chemical composition and mosquito larvicidal activity of essential oils from leaves of different Cinnamomum osmophloeum provenances". *J. Agric. Food Chem.* 52 (14): 4395–400. doi:10.1021/jf0497152. PMID 15237942.
- Easy and clean to use, simply place the contents of the sachet directly into an empty sanitary unit.
- Compact in size, allowing efficient storage and shipping.
- The active substances are highly stable at a range of different temperatures.

Anti-microbial Efficacy

The anti-microbial efficacy of Biosan P max was assessed using a simulated "in use" test in a full size sanitary unit.

A recognized disinfectant strain of bacteria was used to represent the type of bacteria which would be encountered in sanitary waste; *Escherichia coli* NCIMB 8879.

Graph 1. Antimicrobial activity of Biosan P max in sanitary unit



Conclusion

Biosan P max vapour is highly effective in killing *E. coli* in a full scale sanitary waste unit over a 4 week testing regime (>4 log reductions).

Independent testing

Bacteria

The anti-microbial efficacy of Biosan P max has been independently tested and verified using British Standard BSEN 1276. The standard describes a suspension test methodology for establishing whether a disinfectant or antiseptic does or does not possess antibacterial activity under laboratory conditions. The standard applies to food, industrial, domestic and institutional applications. The pass criteria is reduction of bacteria by 99.999%

The anti-microbial efficacy of Biosan e card has been independently tested and verified using British Standard BSEN 13727. The standard describes a suspension test methodology for establishing whether a disinfectant or antiseptic does or does not possess antibacterial activity under laboratory conditions. The standard applies to instruments used in the medical area. The pass criteria is reduction of bacteria by 99.999%

Hepatitis B

The P max actives were independently tested for the ability to destroy the protein HBsAg on the outside of the Hepatitis B virus, which is the internationally accepted test method for anti-Hepatitis B activity. Contact time was 24 hours, and after that time no HMsAg was detectable in the sample, and it was concluded that the active was therefore successful in this test of activity against Hepatitis B virus.

HIV

The virucidal activity of the P max actives were independently tested against HIV-1 using sodium deoxycholate, a known virucidal compound, as a control. It was found that the test compound



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was effective at destroying HIV-1 at concentrations of 1%, 0.1% and 0.01% within 60 minutes of application.

Usage

Tear off top of 1 sachet and pour contents into the bottom of an empty lined unit, product will last for up to 6 weeks in a gradually filled unit.

Packaging

500 sachets per case

63 cases (31 500 sachets) per pallet