



25 YEARS  
OF EXPERTISE  
IN CATHETER  
MAINTENANCE

## CATHETER MAINTENANCE WITH URO-TAINER® PHMB

IMPROVING PATIENT QUALITY OF LIFE

# Uro-Tainer<sup>®</sup> PHMB

## 0.02% Polihexanide

Uro-Tainer<sup>®</sup> PHMB is a catheter maintenance solution for reducing bacterial colonisation within the catheter. It comes in a closed, easy to use delivery system and is used for routine removal of bacteria from suprapubic and indwelling urethral catheters.

### What is PHMB?

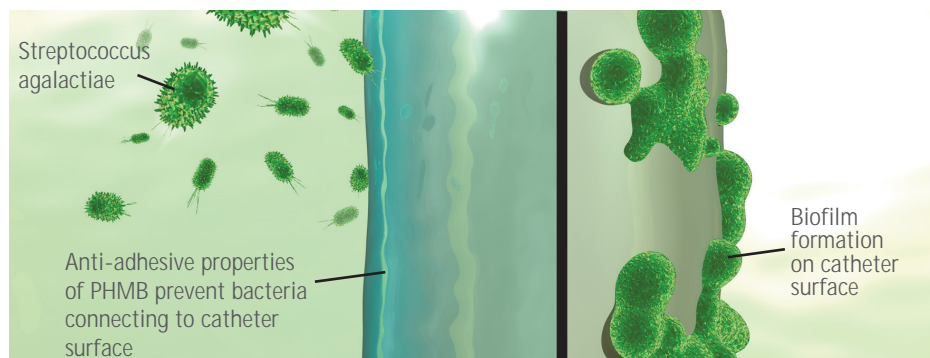
#### Protects Helps Minimises Bacteria

PHMB (known chemically as Poli Hexa Methyline Biguinide or Polihexanide) is active against gram – and gram + bacteria, fungi and yeast including MRSA, *Pseudomonas aeruginosa*, VRE etc.

Bacterial colonisation of urinary catheters is aided by the formation of biofilm, which protect the microorganisms and makes them difficult to eradicate<sup>1,2,3</sup>. These are particularly hard to destroy as they can adhere strongly to the surface of the catheter. Studies have shown PHMB prevents the adhesion of bacteria and biofilm formation<sup>4</sup>. Its cationic nature will destroy the cell membrane integrity, thus killing the bacteria<sup>4,5,6</sup>.

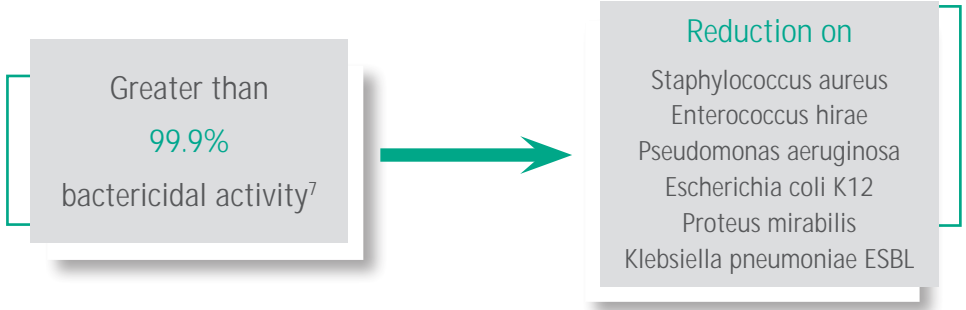
Standard therapeutic doses of antibiotics may have little or no effect on bacteria in biofilm. Evidence suggests that physical removal i.e rinsing is the best method of biofilm removal<sup>1</sup>.

The anti-adhesive effect of polihexanide on biofilm formation has been evaluated in an in vitro study based on a human cell line<sup>4</sup>.



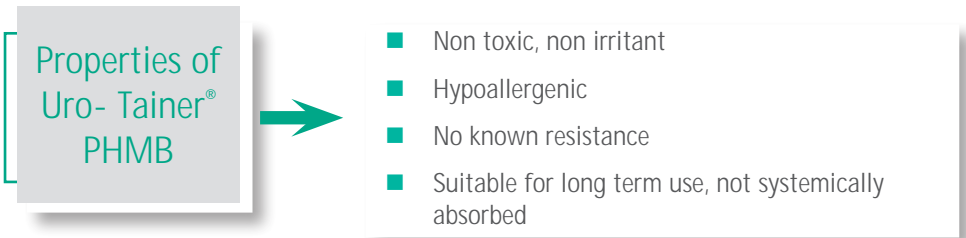
+ *Streptococcus agalactiae* (adapted from: Afinogenoua AG 60<sup>4</sup>)

Uro-Tainer® PHMB is more effective than saline in reducing the bacterial load in the catheter.



## Properties of PHMB

PHMB is not adsorbed by cells and tissue, and therefore cannot interfere with the metabolism of the body.



## Safe, simple delivery system

The Uro-Tainer® concept was developed over 25 years ago to replace standard bladder irrigation using syringes. This system reduces the associated risks of contamination and excessive pressure and/ or vacuum on the bladder wall<sup>8</sup>.

### Benefits

- Completely closed system
- Gentle delivery to patients
- Sterile and ready for immediate use

## Choosing the correct Uro-Tainer® solution

Issue	Risk of bacterial colonisation	Encrustation	Debris, mucus, haematuria
Treatment objective	Prevention or reduction of adhesive cells	Prevent or remove encrustation	Mechanical rinsing or flushing
Uro-Tainer® PHMB	✓	-	✓
Uro-Tainer® NaCl	-	-	✓
Uro-Tainer® Suby G & Uro-Tainer® Solutio R	-	✓	-

Product Description	Size	Product Code	Pack Size
Uro-Tainer® PHMB	100ml	FB99965	10

### Uro-Tainer® PHMB

PHMB is recommended to help aid the removal of debris, mucus, light haematuria and provide bacterial decolonisation of the catheter.

The regime varies from user to user; up to one or two irrigations per day may be required.



### References

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4. AG Afinogenova, K.B Graboyskaya, E. V. Kuleshevich, A.N Suvorov and G. E Afinogenov – Effects of biguanides on the formation of streptococcal biofilms using a human embryo skin fibroblast cell culture model. *Infections in Surgery*, 2011, Vol No 1
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7. Data on file: Brill H, Bactericidal activity of Uro-Tainer in Quantative Suspension Test according to EN13727:2003.
8. Getliffe, KA Bladder Instillations and bladder washouts in the management of catheterised patients. *J Adv Nursing* 1996, 23: 548 -554