What Happens When the Preservative in Mascara is Depleted?
Infections such as Conjunctivitis and Styes.

Eye Infection
Bacterial Growth on the Eyelid
Bacterial Growth Preservative Only (24 hours in lab test)

How Does Hydromer’s New Antimicrobial Polymer Complex Work?

Hydromer’s Antimicrobial Polymer Complex prevents the very first stage of bacterial growth on the eyelid and inhibits eye infection when the preservative is exhausted.

No Bacterial Growth with Hydromer’s Polymer (48 hours in lab test)

Bacterial wall is pierced by the polymer, reducing the potential for bacterial colonization.
Hydromer’s Antimicrobial Polymer Complex Lowers the Risk of Eye Infection

- Have you wondered why properly preserved mascara may still lead to eye infection?
- Is your mascara a potential carrier of bacterial proliferation on the eyelid after extensive use?
- Have you experienced exhaustion of preservative killing power against bacteria in your mascara product when heavily used?

Hydromer’s unique Antimicrobial Polymer Complex prevents the very first stage of bacterial growth on the eyelid and inhibits eye infection when preservative is exhausted.

Test Method Revealed Limitation of Preservative:

For six weeks, two wet mascara formulations were rechallenged/incubated weekly with E. coli and S. aureus, one containing a commonly used preservative system and one containing the preservative system plus Hydromer’s Antimicrobial Polymer Complex.

The conventional preservative was exhausted after six weeks showing microbial growth. Both wet formulations failed the rechallenge test.

In a resulting test, only the applied dry mascara containing Hydromer’s Antimicrobial Complex showed no growth at 72 hours/37º C of incubation and maintained the protection for an additional three weeks.

Conclusion:

Where conventional preservatives fail, Hydromer’s Antimicrobial Complex provides additional protection from microbial attack on the eyelid beyond normal preservation.