



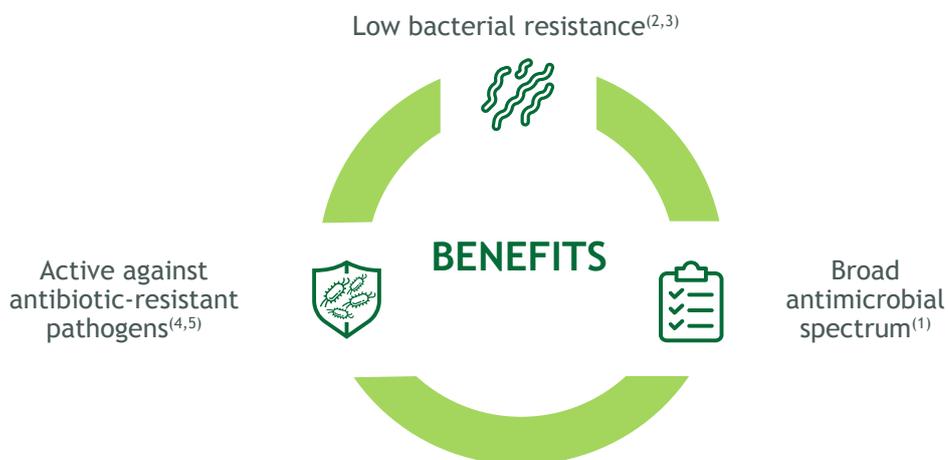
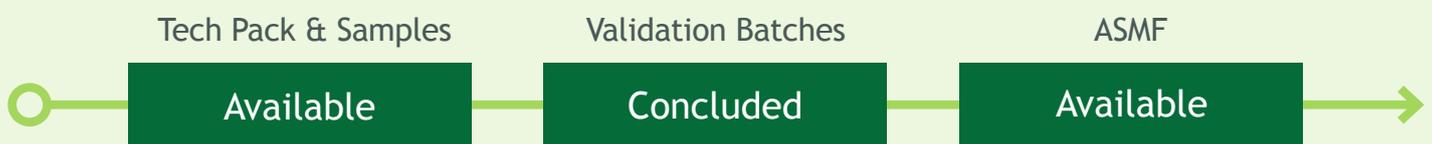
OCTENIDINE DIHYDROCHLORIDE

LATEST ANTISEPTIC API

How Octenidine Works⁽¹⁾

Octenidine is a cationic, surface-active substance, able to bind to microbial cell envelopes, disrupting cell membrane and microcellular metabolism, ultimately leading to cell death. Octenidine has a broad antimicrobial spectrum against Gram-positive and Gram-negative bacteria and fungi, including *S. epidermidis*, *S. aureus*, *P. mirabilis*, *S. pyogenes*, *K. pneumoniae*, *E. coli*, *P. aeruginosa* and *C. albicans*.

Project Timeline



Octenidine vs Chlorhexidine

In general, octenidine has a higher antiseptic activity than chlorhexidine. Furthermore, the concentration of octenidine necessary to achieve complete inactivation of bacteria and yeasts is much lower (approx. 10-fold) than for chlorhexidine.⁽⁶⁾

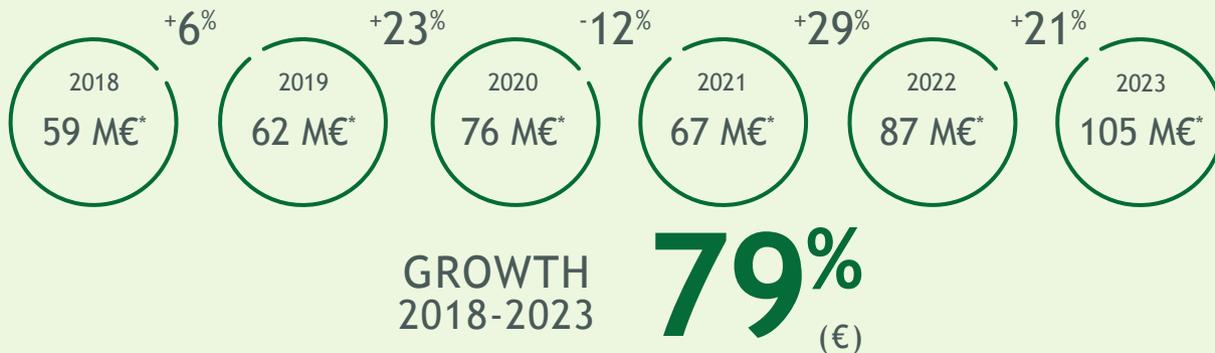
+ PHARMA - Medicinal products for:

Wound management	Skin and mucosa antiseptics	Eradication of Microbial Colonization
Acne	Genital infections	Nasal decontamination

🧴 COSMETIC

Cosmetic solution for mouth and body wash	Preservative in deodorants	Preservative in cosmetics
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FDF Worldwide market size and growth



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ASMF AVAILABLE



References

(1) Hubner N.-O., et al. Octenidine dihydrochloride: A new topical antimicrobial for local treatment of skin, mucous membranes and wounds. *Skin Pharmacol Physiol.* 2010;23(5):244-58. doi: 10.1159/000314699
 (2) Wand M.E., et al. SmvA is an important efflux pump for cationic biocides in *Klebsiella pneumoniae* and other Enterobacteriaceae. *Sci Rep.* 2019 Feb 4;9(1):1344. (3) Chan MKL., et al. Development of a real-time assay to determine the frequency of qac genes in methicillin resistant *Staphylococcus aureus*. *J Microbiol Methods.* 2018 Oct;153:133-138. (4) Alvarez-Marin R., et al. Antimicrobial activity of octenidine against multidrug-resistant Gram-negative pathogens. *Eur J Clin Microbiol Infect Dis.* 2017 Dec;36(12):2379-2383. (5) Conceição T., et al. Efficacy of octenidine against antibiotic-resistant *Staphylococcus aureus* epidemic clones. *J Antimicrob Chemother.* 2016 Oct;71(10):2991-4. (6) Koburger T., et al. Standardized comparison of antiseptic efficacy of triclosan, PVP-iodine, octenidine dihydrochloride, polyhexanide and chlorhexidine digluconate; *J Antimicrob Chemother.* 2010 Aug;65(8):1712-9. doi: 10.1093/jac/dkq212.



Want to know more about OCTENIDINE?
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OCTENIDINE DIHYDROCHLORIDE

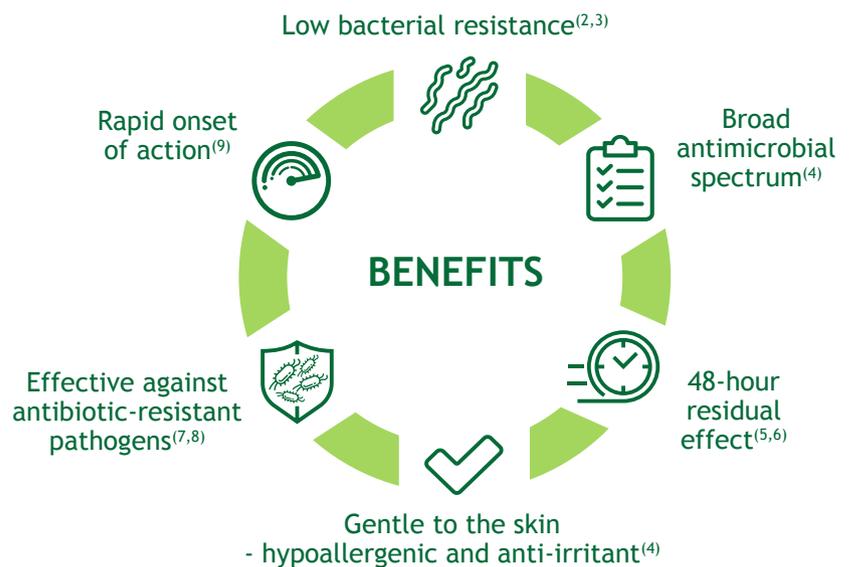
LATEST ANTIMICROBIAL

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Cosmetic applications

- Cosmetic solution for mouth and body wash
- Preservative in cosmetics
- Preservative in deodorants



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References
 (1) Hubner N.-O., et al. Octenidine dihydrochloride: A new topical antimicrobial for local treatment of skin, mucous membranes and wounds. *Skin Pharmacol Physiol.* 2010;23(5):244-58. doi: 10.1159/000314699. (2) Wand ME, Jamshidi S, Bock LJ, Rahman KM, Sutton JM. SmvA is an important efflux pump for cationic biocides in *Klebsiella pneumoniae* and other Enterobacteriaceae. *Sci Rep.* 2019;9(1):1344. (3) Chan MKL, Koo SH, Quek Q, Pang WS, Jiang B, Ng LSY, et al. Development of a real-time assay to determine the frequency of *qac* genes in methicillin resistant *Staphylococcus aureus*. *J Microbiol Methods.* 2018;153:133-8. (4) Hubner NO, Siebert J, Kramer A. Octenidine dihydrochloride, a modern antiseptic for skin, mucous membranes and wounds. *Skin Pharmacol Physiol.* 2010;23(5):244-58. (5) Lutz JT, Diener IV, Freiberg K, Zillmann R, Shah-Hosseini K, Seifert H, et al. Efficacy of two antiseptic regimens on skin colonization of insertion sites for two different catheter types: a randomized, clinical trial. *Infection.* 2016;44(6):707-12. (6) Melicherikova V, Urban J, Goroncy-Bermes P. Residual effect of antiseptic substances on human skin. *J Hosp Infect.* 2010;75(3):238-9. (7) Alvarez-Marín R, Aires-de-Sousa M, Nordmann P, Kieffer N, Poiré L. Antimicrobial activity of octenidine against multidrug-resistant Gram-negative pathogens. *Eur J Clin Microbiol Infect Dis.* 2017;36(12):2379-83. (8) Conceicao T, de Lencastre H, Aires-de-Sousa M. Efficacy of octenidine against antibiotic-resistant *Staphylococcus aureus* epidemic clones. *J Antimicrob Chemother.* 2016;71(10):2991-4. (9) Radtschat N, Augustin M, Herberger K, Wille A, Goroncy-Bermes P. Influence of human wound exudate on the bactericidal efficacy of antiseptic agents in quantitative suspension tests on the basis of European Standards (DIN EN 13727). *Int Wound J.* 2020;17(3):781.