



Octenidine Dihydrochloride

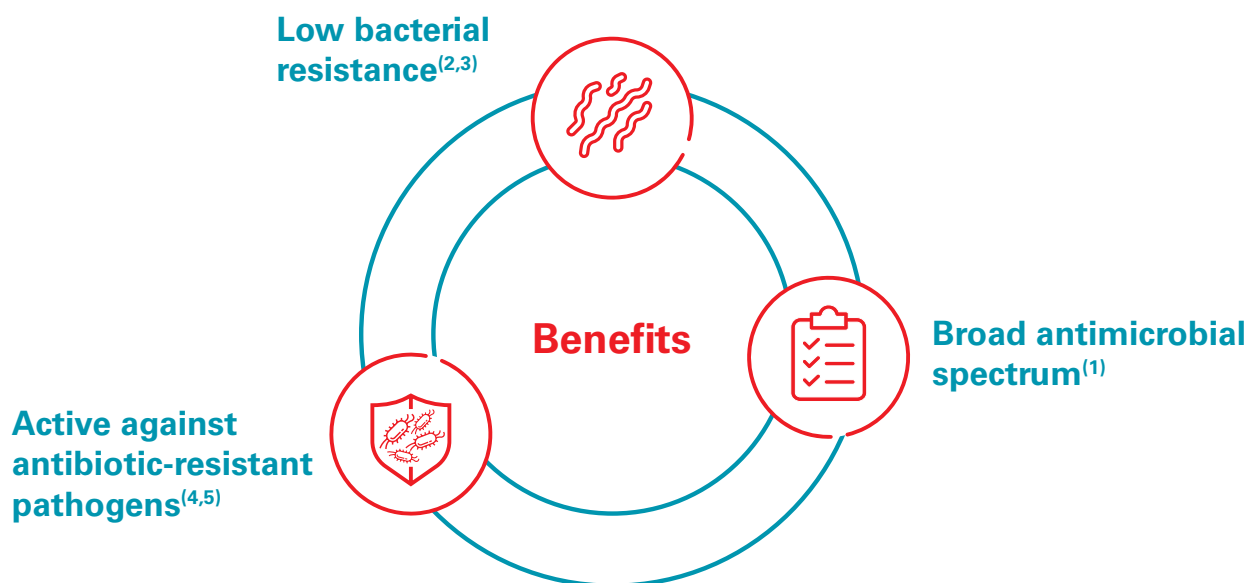
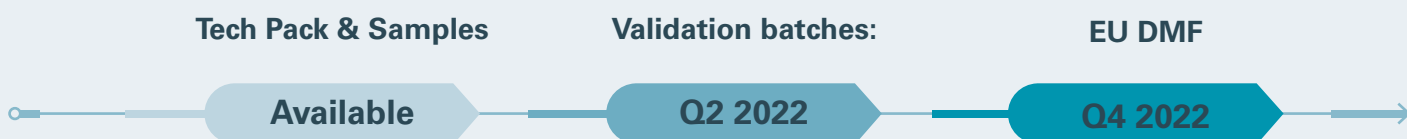
HELM latest antiseptic API

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 Timelines



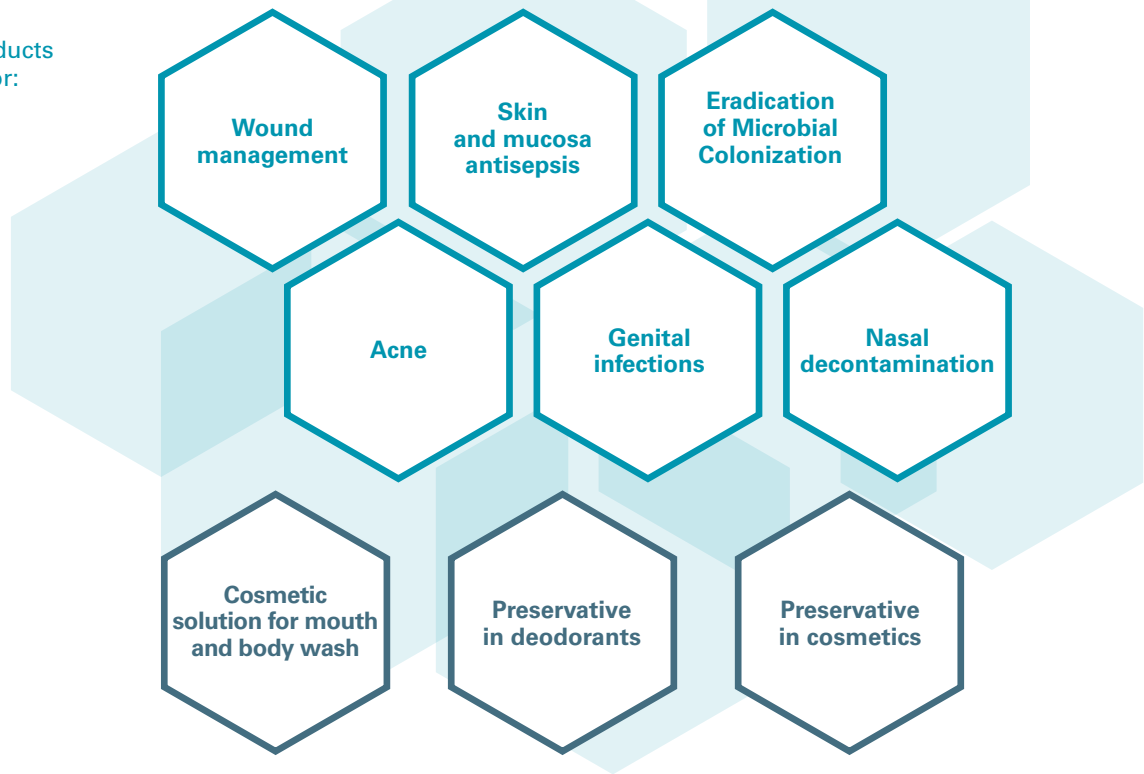
Octenidine vs Chlorhexidine

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⁾

Applications

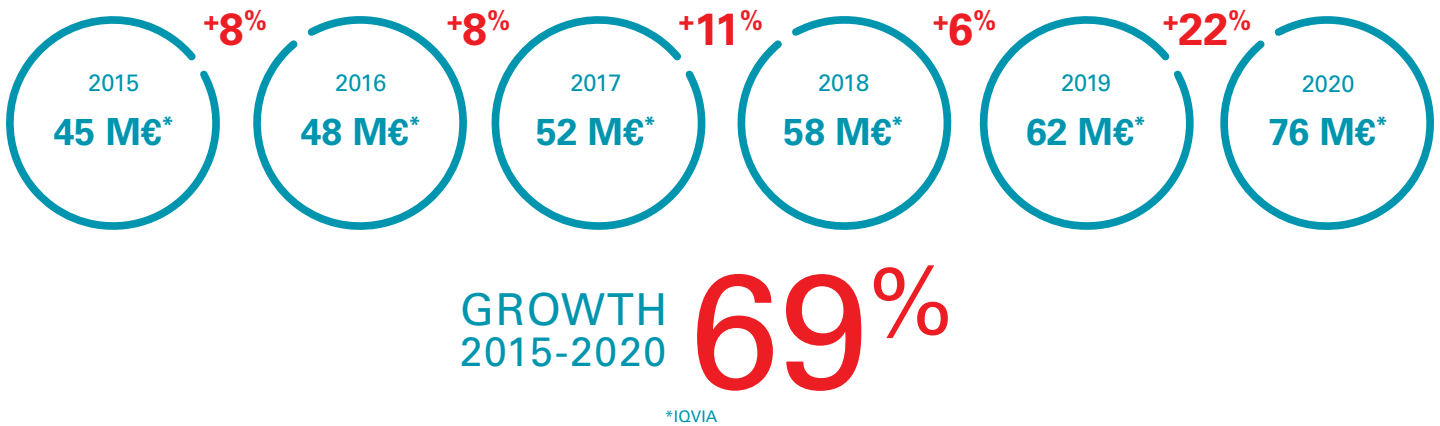
PHARMA

- Medicinal products applications for:



COSMETIC

FDF Worldwide market size and growth



Developed together with **Lebsa**

EU DMF available in Q4 2022



Want to know more about Octenidine? CONTACT

Jovani Valdovinos

ljvaldovinos@helmportugal.com

(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., 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.