

DEBRICHEM

A new disruptive biofilm elimination method

DEB^x
MEDICAL



Watch our product video



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DEBRICHEM®

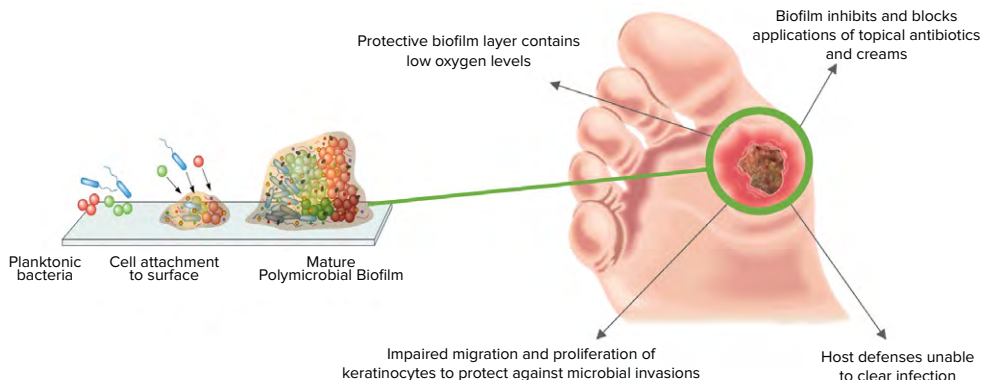
- DEBRICHEM® is used for Chemical Debridement of non-healing wounds and was developed by DEBx Medical.
- It is a one application, single use medical device applied by healthcare professionals only, that can be considered as an alternative for surgical debridement and conservative sharp wound debridement.
- DEBRICHEM® is a semi-fluid substance (red gel) containing an acid, housed within a glass vial with a Teflon lined black screw cap.
- Within one minute of topical application this acidic red gel facilitates the removal of infection and biofilm in chronic wounds by desiccation, allowing healing to start in more than 90% of cases¹.

Note:

- Always consult the instruction for use and the indications, warnings and side effects.
 - Always make sure to follow the steps as indicated in the instruction for use.

Biofilm

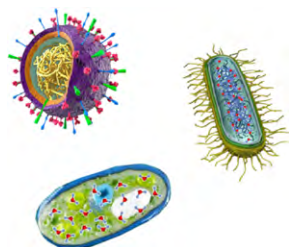
80% of chronic wounds have biofilm², a thin layer of glycoproteic material (biofilm) formed by actively replicating bacteria which adheres to the lesion and protects infections. Replicating bacteria that form the biofilm contribute to aggravating the lesions and delaying the healing process to the point that the wound becomes chronic and resistant to antimicrobials. A matured Biofilm has become a polymicrobial structure that embeds their own micro-organisms and protects and nourishes them. Biofilm is invisible to the eye and it consists for 98% out of water².



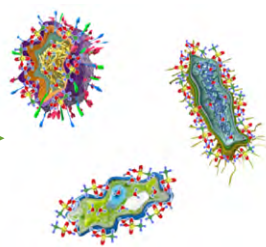
Working principle

- DEBRICHEM® desiccates the biofilm, as well as the residing and planktonic micro-organisms within 60 seconds of application.
- By instantly capturing water molecules from any type of exposed biological material, DEBRICHEM® has an immediate dehydrating effect, with minimal damage to the vital tissue below the wound bed.
- Once the biofilm and its micro-organisms have been destroyed the immune reaction needed for the normal wound healing process restarts.
- After exposure to DEBRICHEM® the desiccated biofilm precipitates and coagulates together, this non-viable material separates from the underlying healthy surface over time by spontaneous detachment.

Before application



After application



Debridement treatment with DEBRICHEM®



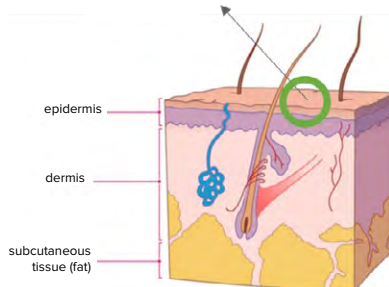
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Why doesn't DEBRICHEM® affect the healthy tissue?

DEBRICHEM® has a strong hygroscopic action by instantly capturing water molecules from any type of biological material. As the biofilm on a wound consists out of 98% water, the rapid reaction denatures the proteins, extracellular matrix and glycan-like structures in the microbial constituents inside the biofilm, giving bacteria, fungi and viruses no chance to survive and hereby removing the infection.

In contrast to the external material in the wound bed, viable tissue and healthy skin are protected by membrane lipids exposing lower water content. This protects the epidermal layer of the surrounding skin from the desiccation effect. Mostly the biofilm is affected due to our unique chemical composition and the method of use.

Low water content protects the skin from being affected by DEBRICHEM®



¹ A. Cogo et al, "Restarting the Healing process of Chronic wounds, using a novel Desiccant: A prospective case series", *Wounds* 2020;3(1):1-8

² Malone M, Bjarnsholt T, McBain AJ (2017) The prevalence of biofilms in chronic wounds: a systematic review and meta analysis of published data. *J Wound Care*26(1): 20–25