3M Science. Applied to Life.™

3M™ Kerracontact™ Ag Dressing

Frequently Asked Questions

1. What is Kerracontact Ag Dressing?

Kerracontact Ag dressing is a silver wound contact dressing designed for both chronic and acute wounds.

It's comprised of three layers, all coated with Ag Oxysalts™ Technology. The two outer layers are a non adherent polyethylene mesh surrounding a polyester core to help wick moisture into a secondary dressing of your choice.

- Powerful*,†,1,2 and fast kill*,5
- Kills bacterial within a biofilm*,†,1,2
- Promotes healing independent of infection*,†,3

2. What type of silver is used within Kerracontact Ag Dressing?

There are many types of silvers that can be incorporated into wound dressings, including

- Metallic silver
- Silver sulfadiazine
- Silver chloride
- Silver sulfate
- Silver oxide
- Patented Ag Oxysalts™ Technology

Kerracontact Ag Dressing uses Ag Oxysalts™ that have a higher oxidation state (more active) Ag^{3+}, making it up to six times more powerful than any other commercially available silver. While, at the same time, releasing oxygen and helping to create a more favourable foundation for healing*.

3. What wounds can I use Kerracontact Ag Dressing on?

Kerracontact Ag dressing is indicated for use on pressure ulcers, leg ulcers, diabetic foot ulcers, first and second-degree burns, and graft sites. The dressing may be used over debrided and grafted wounds.

4. What are the contraindications?

Kerracontact Ag dressing should not be used on individuals who are sensitive to or who have had an allergic reaction to the dressing or its components.

Do not use on patients during MRI (Magnetic Resonance Imaging) examination.

Cautions

- Single use only. Do not re-use the dressing, re-use may cause contamination
- Should not be used on patients with a known sensitivity to silver
- Not compatible with oil-based products, such as petrolatum
- Kerracontact Ag dressing may not be compatible with other topical antimicrobials
- Remove dressing prior to administering radiation therapy. A new dressing can be applied following treatment
- Avoid contact with electrode and conductive gels during electronic measurements (e.g. EEG and ECG)
- Permanent skin discoloration may occur after cumulative use of the product at the site of use, where the dressing contacts the skin
- Gloves should be worn while handling the dressing to avoid cross-contamination
- Kerracontact Ag dressing should not be used in pregnant women and cautious use is advised in lactating women and neonates / small babies, because of a lack of data
- Product should not be used on individuals with G6PD deficiency

5. Should Kerracontact Ag Dressing be pre-moistened before its use?

Kerracontact Ag Dressing should be used according to your local clinical protocols. The dressing should be pre-moistened with sterile water prior to application and at dressing changes if the wound is dry.

6. Can Kerracontact Ag Dressing be cut to size?

Yes, Kerracontact Ag dressing can be cut to the size and shape of the wound as necessary.

7. Can there be an overlap around the edge of the wound?

Yes, you can overlap to ensure the dressing is effective across the whole of the wound.

8. How often should the dressing be changed?

Kerracontact Ag dressing is effective for up to seven days, although depending on the levels of exudate and the condition of the secondary dressing, more frequent dressing changes may be required. You may want to change more frequently in order to monitor the wound infection.

9. What secondary dressing can I use to keep the dressing in place?

Kerracontact Ag dressing is a primary wound contact layer dressing and will require a secondary dressing to remain in place and to absorb wound exudate. An absorbent dressing maybe required such as foam or superabsorbent. Alternatively, compression bandaging during the treatment of venous leg ulcer is suitable to be used with Kerracontact Ag dressing.

Select a suitable secondary dressing depending on the level of exudate for example a 3M™ Tegaderm™ Foam Adhesive Dressing can be used if the exudate levels are moderate otherwise 3M™ Kerramax Care™ Superabsorbent Dressing can be used if the exudate levels are high.

10. Does Kerracontact Ag Dressing sting?

For patients with extreme sensitivity in the wound area, a slow and low pH shift will prevent or minimize burning and stinging on initial application of a silver dressing. Kerracontact Ag dressing has shown to have a low pH shift when compared to other silver dressings reducing the risk of stinging[1].

11. How long does the silver remain active?

The silver within the dressing can remain active for seven days[1].

12. How much silver is in the Kerracontact Ag Dressing and how does this compare with other silver dressings?

Dressing	Ag Content (mg/100cm^2)	Silver Oxidation States Present
Acticoat®	161	Ag^0 + Ag^{1+}
Mepilex Ag®	120	Ag^1
Kerracontact Ag Dressing	**40**	**Ag^{1+} + $Ag2^+$ + Ag^{3+}**
Aquacel Ag®	8.3	Ag^{1+}

13. What is Ag Oxysalts™ Technology and how is this different when compared with other silver dressings?

Ag Oxysalts™ Technology uses the silver oxnitrate compound which has an oxidation state of Ag^{2+} and Ag^{3+}. All silvers kill bacteria by a means of a chemical reaction. Ordinary Ag^+ atoms have only one missing electron, whereas Ag atoms in the Ag Oxysalts™ Technology have three missing electrons. Upon contact with exudate silver ions are released, they penetrate the bacteria cell and pull electrons away from the micro-organisms' cellular components. When silver ions interact with the cell they can disrupt both protein and DNA synthesis of the micro-organism.

Ordinary silver dressings have 0 or 1 (Ag^0 + Ag^{1+}) electrons missing making them less interactive with the harmful micro-organisms within the wound.

Silver dressings with higher oxidation states (Ag^{2+}, Ag^{3+}) have only recently been incorporated into wound care products. Ag Oxysalts™ Technology has a higher reactivity and oxidation state, allowing the dressing to have a lower silver content and still have an excellent antimicrobial effect.

14. What makes Kerracontact Ag Dressing different when compared with ordinary silver dressings?

Ag Oxysalt™ Technology is the only silver technology used in wound dressings to contain silver in its most active state – making it fast and effective at killing bacteria.

Ag Oxysalts™ Technology is a unique type of silver that is up to six times more powerful than any other commercially available silver. While, at the same time, releasing oxygen which could help to create a more favourable foundation for healing*,[3].

- Kills at least 99.999% (5 log) of a broad spectrum of bacteria including multi-drug resistant organisms*,[1]
- Starts to kill bacteria within 30 minutes*,[5]
- Kills bacteria within a biofilm*,[1,2]
- Effective at killing bacteria for 7 days*,[6]
- Promotes healing independent of infection*,†,[3]

15. I've heard that some silver dressings can be cytotoxic and harm the wound, is Kerracontact Ag Dressing different?

Kerracontact Ag is proven to be bio-compatible[11]. In addition, Ag Oxysalts™ have been shown to promote re-epithelialisation of uninfected keratinocye scratch wounds (in vitro)[12]. Furthermore, KerraContact Ag dressing has been shown to promote healing of uninfected wounds in vivo.

16. How does Kerracontact Ag Dressing deliver oxygen to the wound?

All cells within a wound require oxygen. Providing additional oxygen to the wound may supply these cells with vital oxygen to help them function more effectively[7]. Ag Oxysalts Technology (Ag_7NO_{11}) has the ability to produce oxygen in two ways;

1. Naturally as the Ag Oxysalts™ break down*,[3].
2. Through converting detrimental levels of naturally occurring hydrogen peroxide (H_2O_2) which is produced by inflammatory cells. This hydrogen peroxide is converted to oxygen and water*,[3].

17. Why is killing bacteria within a biofilm important?

Biofilms are complex microbial communities, containing bacteria and sometimes also fungi, which are embedded in a protective polysaccharide matrix. The matrix attaches the biofilm to a surface, such as a wound bed, and protects the microorganisms from the host's immune system and from antimicrobial agents such as antiseptics and antibiotics. Biofilms are commonly present in chronic wounds, and are thought to contribute to, and perpetuate, a chronic inflammatory state that prevents healing[7].

Kerracontact Ag dressing will kill bacteria within the biofilm and therefore help wounds where the presence of biofilm maybe causing delayed healing[10].

18. What microbes is Kerracontact Ag Dressing effective against?

Kerracontact Ag dressing has been proven to be effective at killing a broad spectrum of bacteria and fungi including[1]:

Gram Negative
- Acinetobacter baumannii
- Escherichia coli
- Pseudomonas aeruginosa
- Klebsiella pneumoniae
- Stenotrophomonas maltophilia

Gram Positive
- Corynebacterium striatum
- Enterococcus faecalis
- Enterococcus faecalis VRE
- Staphylococcus epidermidis
- Staphylococcus aureus

Yeast/fungi
- Candida albicans
- Aspergillus niger

Aspergillus fumigatus
- Fusarium solani
- Penicillium glabrum

19. Why should I use Kerracontact Ag Dressing?

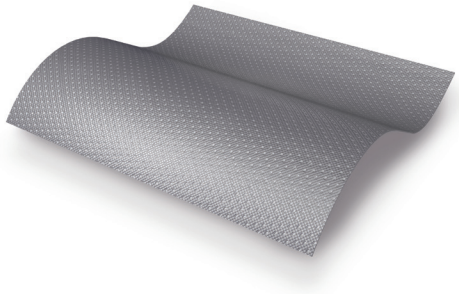
Wound infection is a painful and debilitating experience for any patient, it can lead to increase morbidity and can cause death.

Patients with decreased immune functions, such as diabetes or the elderly are at an increased risk of wound infection. Treating the infection quickly and effectively is important to reduce the risk of serious complications. Kerracontact Ag dressing is fast and powerful at killing bacteria[1,2,*], kills bacteria within a biofilm[1,2,*] , and has also shown to promote healing.[3,*,†]

20. What sizes are available?

Kerracontact Ag dressing is available in the following sizes:

Size	Dressings per box	Product Code
5cm x 5cm	5	CWL1041
10cm x 12.5cm	5	CWL1042
15cm x 15cm	5	CWL1043
20cm x 40cm	5	CWL1044



*As demonstrated *in-vitro*. †As demonstrated *ex-vivo*. ‡As demonstrated *in-vivo*.

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NOTE: Specific indications, limitations, contraindications, warnings, precautions and safety information exist for these products and therapies. Please consult a clinician and product instructions for use prior to application.

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