

CLAIMS:

1. A wound dressing or debridement tool comprising an absorbent layer impregnated
5 or coated with a composition comprising a chelating agent, an amphoteric surfactant, and
an anionic surfactant.
2. The wound dressing or debridement tool of claim 1, wherein the anionic surfactant
is present at 0.05 to 1.5 wt %, or 0.1 to 1 wt %, or 0.1 to 0.5 wt %.
- 10 3. The wound dressing or debridement tool of claim 1 or claim 2, wherein the anionic
surfactant is chosen from a fatty acid or fatty acid salt, a sulphate, a sulposuccinate, a
sarcosine, a sarcosinate, an isethionate, a glutamate, or a taurate.
- 15 4. The wound dressing or debridement tool of any preceding claim, wherein the
amphoteric surfactant is present at 0.01 to 1.5 wt %, or 0.02 to 0.8 wt %, or 0.05 to 0.5 wt
%.
5. The wound dressing or debridement tool of any preceding claim, wherein the
20 amphoteric surfactant is chosen an hydrocarbyl-amphoacetate, alkenyl-amphoacetate,
hydrocarbyl-amphodiacetate, alkenyl-amphodiacetate, hydrocarbylampho-propionate,
hydrocarbylampho-dipropionate, or hydrocarbylamphohydroxypropyl sultaine, wherein the
hydrocarbyl and alkenyl groups contain 6 to 24, or 8 to 24 carbon atoms.
- 25 6. The wound dressing or debridement tool of any preceding claim, wherein the
chelating agent is present at 0.01 to 1 wt %, or 0.1 to 0.75 wt %, or 0.1 to 0.5 wt %.
7. The wound dressing or debridement tool of any preceding claim, wherein the
chelating agent is chosen from a hydroxy-carboxylic acid ester or amide acid, or salts thereof
30 (for example a citrate, tartrate, tartramide, or tartrimide, gluconic acid, a gluconate, a

lactate, lactic acid, glycolic acid, or glycolate), an oxalate, a phosphate, or a salt of ethylenediaminetetra-acetic acid (EDTA).

8. The wound dressing or debridement tool of any preceding claim, wherein the composition may be impregnated or coated in the wound dressing comprises:

the chelating agent is present at 0.01 to 1 wt %,
the anionic surfactant is present at 0.05 to 1.5 wt %,
the amphoteric surfactant is present at 0.01 to 1.5 wt %.

9. The wound dressing or debridement tool of any preceding claim, wherein the composition may be impregnated or coated in the wound dressing comprises:

the chelating agent is present at 0.1 to 0.75 wt %,
the anionic surfactant is present at or 0.1 to 1 wt %, or
the amphoteric surfactant is present at or 0.02 to 0.8 wt %.

10. The wound dressing or debridement tool of any preceding claim, wherein the composition may be impregnated or coated in the wound dressing comprises:

the chelating agent is present at 0.1 to 0.5 wt %,
the anionic surfactant is present at 0.1 to 0.5 wt %,
the amphoteric surfactant is present at or 0.05 to 0.5 wt %.

11. The wound dressing or debridement tool of any preceding claim, wherein the impregnated or coated in the wound dressing or debridement tool comprises:

the chelating agent is present at 0.1 to 0.5 wt % (or 0.15 to 1.5 gm⁻²),
the anionic surfactant is present at 0.1 to 0.5 wt % (or 0.15 to 1.5 gm⁻²), and
the amphoteric surfactant is present at or 0.05 to 0.4 wt % (or 0.075 to 0.6 gm⁻²).

12. The wound dressing or debridement tool of any preceding claim, wherein the impregnated or coated in the wound dressing or debridement tool comprises:

the amphoteric surfactant is chosen from an hydrocarbyl-amphoacetate, alkenyl-amphoacetate, hydrocarbyl-amphoacetate, alkenyl-amphoacetate, hydrocarbylampho-propionate, hydrocarbylampho-dipropionate, or hydrocarbylamphohydroxypropyl sultaine, wherein the hydrocarbyl groups contain
5 6 to 24, or 8 to 24 carbon atoms;

the anionic surfactant is chosen from a fatty acid or fatty acid salt, sulphate, a sulphosuccinate, a sarcosine, a sarcosinate, an isethionate, taurate, and a glutamate; and

the chelating agent is chosen from a hydroxy-carboxylic acid ester or amide
10 acid, or salts thereof (for example a citrate, tartrate, tartramide, or tartramide, gluconic acid, a gluconate, a lactate, lactic acid, glycolic acid, or glycolate), an oxalate, a phosphate, or a salt of ethylenediaminetetra-acetic acid (EDTA).

13. The wound dressing or debridement tool of any preceding claim, wherein the
15 composition may be impregnated or coated in the wound dressing comprises:

the amphoteric surfactant is chosen from an hydrocarbyl-amphoacetate, alkenyl-amphoacetate, hydrocarbyl-amphoacetate, alkenyl-amphoacetate, hydrocarbylampho-propionate, hydrocarbylampho-dipropionate, or hydrocarbylamphohydroxypropyl sultaine, wherein the hydrocarbyl groups contain
20 6 to 24, or 8 to 24 carbon atoms;

the anionic surfactant is chosen from a fatty acid or fatty acid salt, a glutamate, a sulphosuccinate, a sarcosine, or a sarcosinate; and

the chelating agent is chosen from an oxalate, a citrate, a phosphate, or a salt of EDTA.

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14. The wound dressing or debridement tool of any preceding claim, wherein the composition may be impregnated or coated in the wound dressing further comprises: a nonionic surfactant.

15. The wound dressing of claim 14, wherein the nonionic surfactant is present at 0.01 to 0.7 wt % (or 0.015 to 1.05 gm⁻²), or 0.05 to 0.5 wt % (or 0.075 to 0.75 gm⁻²), or 0.1 to 0.3 wt % (or 0.15 to 0.45 gm⁻²).
- 5 16. The wound dressing or debridement tool of any preceding claim, wherein the composition may be impregnated or coated in the wound dressing or debridement tool comprises:
- the chelating agent is present at 0.01 to 1 wt % (or 0.015 to 1.5 gm⁻²),
the anionic surfactant is present at 0.05 to 1.5 wt % (or 0.075 to 2.25 gm⁻²),
10 the amphoteric surfactant is present at 0.01 to 1.5 wt % (or 0.015 to 2.25 gm⁻²), and
the nonionic surfactant may be present at 0.01 to 0.7 wt % (or 0.015 to 1.05 gm⁻²).
- 15 17. The wound dressing or debridement tool of any preceding claim 14 to 16, wherein the nonionic surfactant is chosen from polyoxyethylene fatty acid esters (polyoxyethylene sorbitan fatty acid ester), polyoxyethylene glycol fatty acid esters (polyoxyethylene glycol fatty acid ester), sucrose fatty acid esters (sucrose fatty acid ester), poly oxyethylene hydrogen carbonate castor oils and polyoxyethylene alkyl ethers (polyoxyethylene hydrogenated castor oil) ether (polyoxyethylene alkyl ether).
- 20 18. The wound dressing or debridement tool of any preceding claim, wherein the absorbent layer impregnated or coated with the composition comprises at least one layer composed of a foam, absorbent (typically a superabsorbent), or a gel-forming fibre.
- 25 19. The wound dressing or debridement tool of any preceding claim, wherein the wound dressing absorbent layer is a gel-forming fibre.

20. The wound dressing or debridement tool of any preceding claim, wherein the wound dressing absorbent layer is a gel-forming fibre. And the fibre is chemically modified carboxymethylcellulose fibres, typically sodium carboxymethylcellulose fibres.
- 5 21. A wound dressing, which is a wound dressing according to any of claims 1-20.
22. A debridement tool, which is a debridement tool according to any of claims 1-20.
23. The use of the wound dressing to prevent or minimise slough accumulation in a
10 wound, by contacting the wound dressing or debridement tool of any preceding claim 1 to 22 with a wound, wherein the wound is a chronic wound, acute wound, or burn.
24. The use of the wound dressing or debridement tool of any preceding claim 1 to 23 for the treatment of a chronic wound, acute wound, or burn, wherein the chronic wound,
15 acute wound or burn has a bacterial biofilm.
25. The use of the wound dressing or debridement tool of any preceding claim 1 to 24 to de-slough a wound, wherein the wound is a chronic wound, acute wound, or burn.
- 20 26. A composition comprising a chelating agent, an amphoteric surfactant, and an anionic surfactant for use in the treatment of a wound, such as a chronic wound, acute wound, burn, a wound comprising a bacterial biofilm or a wound comprising slough.
27. The composition for use of claim 26, wherein the composition is as claimed in any one of claims 1 to 22.