

Properties of topical agents and dressing materials

Type	Actions	Indications/use	Precautions/contraindications
Alginates/CMC*	<ul style="list-style-type: none"> Absorb fluid. Promote autolytic debridement. Moisture control. Conformability to wound bed. 	<ul style="list-style-type: none"> Moderate to high exuding wounds. Special cavity presentations in the form of rope or ribbon. Combined presentation with silver for antimicrobial activity. 	<ul style="list-style-type: none"> Do not use on dry/necrotic wounds. Use with caution on friable tissue (may cause bleeding). Do not pack cavity wounds tightly.
Foams	<ul style="list-style-type: none"> Absorb fluid. Moisture control. Conformability to wound bed. 	<ul style="list-style-type: none"> Moderate to high exuding wounds. Special cavity presentations in the form of strips or ribbon. Low-adherent versions available for patients with fragile skin. Combined presentation with silver or PHMB for antimicrobial activity. 	<ul style="list-style-type: none"> Do not use on dry/necrotic wounds or those with minimal exudate.
Honey	<ul style="list-style-type: none"> Rehydrate wound bed. Promote autolytic debridement. Antimicrobial action. 	<ul style="list-style-type: none"> Sloughy, low to moderate exuding wounds. Critically colonized wounds or clinical signs of infection. 	<ul style="list-style-type: none"> May cause "drawing" pain (osmotic effect). Known sensitivity.
Hydrocolloids	<ul style="list-style-type: none"> Absorb fluid. Promote autolytic debridement. 	<ul style="list-style-type: none"> Clean, low to moderate exuding wounds. Combined presentation with silver for antimicrobial activity. 	<ul style="list-style-type: none"> Do not use on dry/necrotic wounds or high exuding wounds. May encourage overgranulation. May cause maceration.
Hydrogels	<ul style="list-style-type: none"> Rehydrate wound bed. Moisture control. 	<ul style="list-style-type: none"> Dry/low to moderate exuding wounds. Combined presentation with 	<ul style="list-style-type: none"> Do not use on highly exuding wounds or where anaerobic infection is suspected. May cause maceration.

	<ul style="list-style-type: none"> Promote autolytic debridement. Cooling. 	silver for antimicrobial activity.	
Iodine	<ul style="list-style-type: none"> Antimicrobial action. 	<ul style="list-style-type: none"> Critically colonized wounds or clinical signs of infection. Low to high exuding wounds. 	<ul style="list-style-type: none"> Do not use on dry necrotic tissue. Known sensitivity to iodine. Short-term use recommended (risk of systemic absorption).
Low-adherent wound contact layer (silicone)	<ul style="list-style-type: none"> Protect new tissue growth. Atraumatic to periwound skin. Conformable to body contours. 	<ul style="list-style-type: none"> Low to high exuding wounds. Use as contact layer on superficial low exuding wounds. 	<ul style="list-style-type: none"> May dry out if left in place for too long. Known sensitivity to silicone.
PHMB	<ul style="list-style-type: none"> Antimicrobial action. 	<ul style="list-style-type: none"> Low to high exuding wounds. Critically colonized wounds or clinical signs of infection. May require secondary dressing. 	<ul style="list-style-type: none"> Do not use on dry/necrotic wounds. Known sensitivity.
Odor control (eg, activated charcoal)	<ul style="list-style-type: none"> Odor absorption. 	<ul style="list-style-type: none"> Malodorous wounds (due to excess exudate). May require antimicrobial if due to increased bioburden. 	<ul style="list-style-type: none"> Do not use on dry wounds.
Protease modulating	<ul style="list-style-type: none"> Active or passive control of wound protease levels. 	<ul style="list-style-type: none"> Clean wounds that are not progressing despite correction of underlying causes, exclusion of infection, and optimal wound care. 	<ul style="list-style-type: none"> Do not use on dry wounds or those with leathery eschar.
Silver	<ul style="list-style-type: none"> Antimicrobial action. 	<ul style="list-style-type: none"> Critically colonized wounds or clinical signs of infection. Low to high exuding wounds. Combined presentation with foam and alginates/CMC for increased absorbency. Also in paste form. 	<ul style="list-style-type: none"> Some may cause discoloration. Known sensitivity. Discontinue after 2 weeks if no improvement and reevaluate.
Polyurethane film	<ul style="list-style-type: none"> Moisture control. Breathable bacterial barrier. 	<ul style="list-style-type: none"> Primary dressing over superficial low exuding wounds. 	<ul style="list-style-type: none"> Do not use on patients with fragile/compromised periwound skin.

	<ul style="list-style-type: none">▪ Transparent (allow visualization of wound).	<ul style="list-style-type: none">▪ Secondary dressing over alginate or hydrogel for rehydration of wound bed.	<ul style="list-style-type: none">▪ Do not use on moderate to high exuding wounds.
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Other more advanced dressings (eg, collagen and bioengineered tissue products) may be considered for wounds that are hard to heal^[1].

CMC: carboxymethylcellulose; PHMB: polyhexamethylene biguanide.

* Wound dressings may contain alginates or CMC only; alginates may also be combined with CMC.

Reference:

1. *International Consensus. Acellular matrices for the treatment of wounds. An expert working group review. Wounds International 2010. Available at <http://woundsinternational.com> (Accessed on March 2013).*

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