MEDLINE

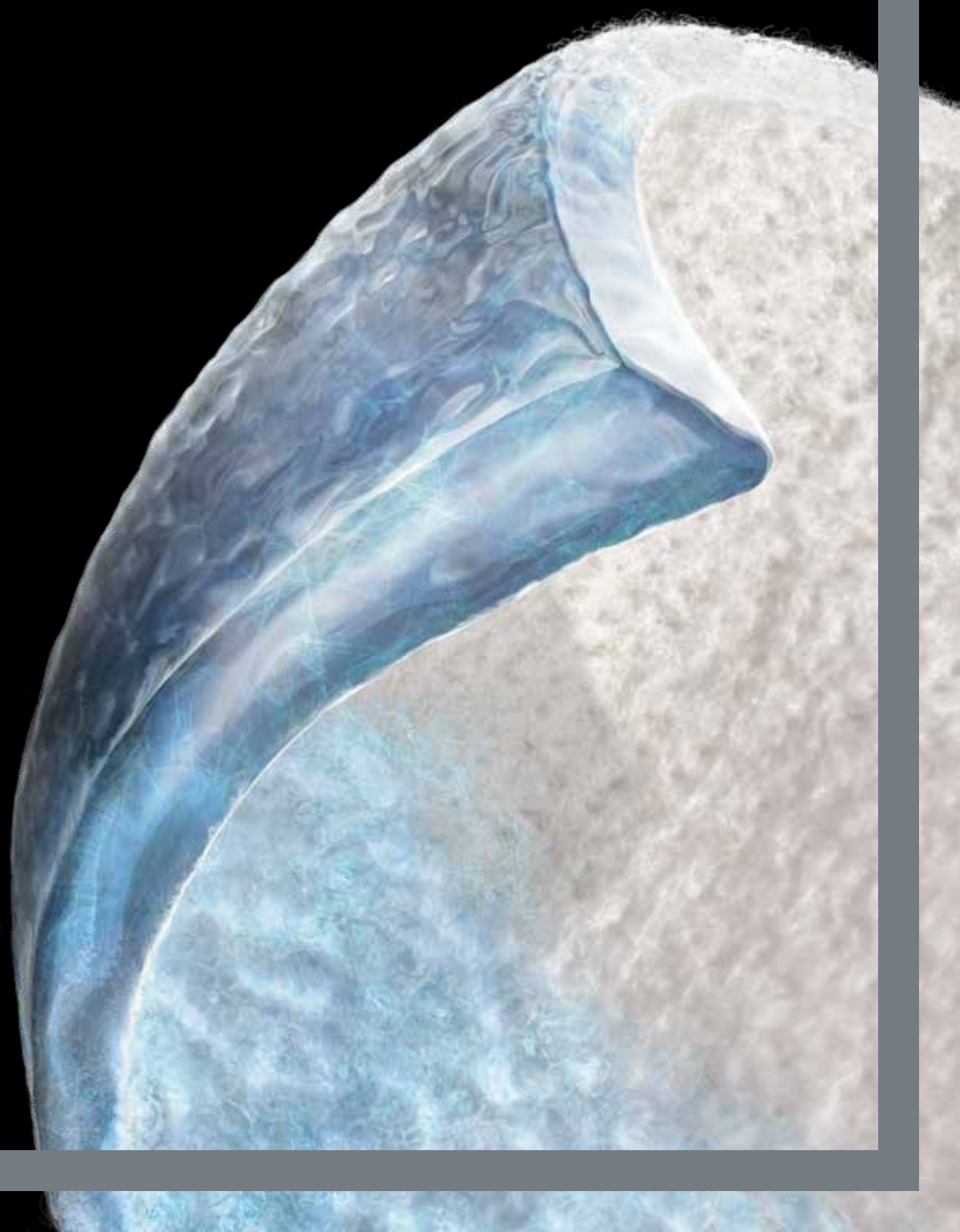
ADVANCED
WOUND CARE

OPTICELL® Ag+

INTIMATE WOUND CONTACT FOR OPTIMAL HEALING

with chytoform™

Chitosan-based gelling fiber technology



OPTICELL AG+

ANTIBACTERIAL EFFICACY.

Opticell Ag+ delivers broad spectrum antibacterial efficacy. The dressings contain 0.75% ionic silver by weight. When the dressing encounters a wound environment, silver ions are activated to manage bioburden. The silver inhibits the growth of bacteria and fungi in the dressing, yet is harmless to skin cells (noncytotoxic).*

In vitro antibacterial efficacy of Opticell Ag+

Opticell Ag+ has been shown to kill many micro-organisms over a 7 day period, including:*

- Methicillin-resistant *Staphylococcus aureus* (MRSA) ATCC 33591—gram positive bacteria
- *Escherichia coli* ATCC 8739—gram negative bacteria
- *Pseudomonas aeruginosa* ATCC 9027—gram negative bacteria
- *Candida albicans* ATCC 10231—yeast
- Vancomycin-resistant *Enterococcus faecalis* (VRE) ATCC 51575—gram positive bacteria
- *Staphylococcus aureus* ATCC 6538—gram positive bacteria

*In-vitro antibacterial data on file.

OPTICELL AG+

EXPECT MORE FROM YOUR GELLING FIBER.

chytoform™

Opticell with Chytoform™ Technology is the next generation of chronic wound care dressings. Chytoform is a proprietary chitosan-based gelling fiber technology. Opticell is the first chronic wound care dressing that uses this advanced biological material.

For decades, chitosan has been used in health care applications—in topical hemostats, treatments for surgical wounds, traumatic injuries and dietary supplements—because of its distinctive properties.

What is Chitosan?

A biological material derived from crustacean shells, chitosan possesses a very unique chemistry, including a positive charge at physiological pH. This unique chemistry can be beneficial in a wound environment where there are negative particles, like those found in necrotic tissue and wound exudate. Consequently, chitosan continues to be the center of much academic and clinical research.[1-5]

How does Opticell work?

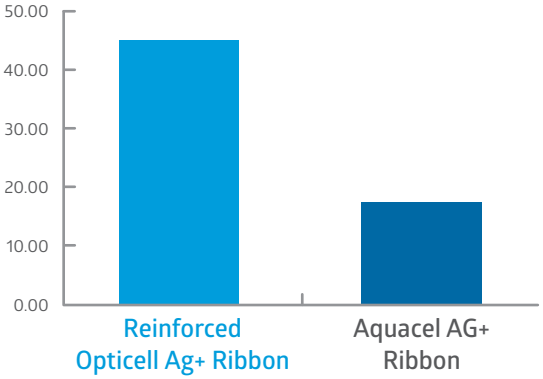
When moistened, the absorbent fibers of Opticell transform into a conformable gel. This gelling action, combined with its unique chemistry, strength and absorbency, allows Opticell to deliver outstanding benefits.

GENTLE PATIENT CARE.

Easier removal from the wound

Opticell Ag+ ribbon is designed for use in deep and tunneling wounds. The ribbons are reinforced with strong fiber stitching to ensure one piece removal and ease dressing changes. Opticell Ag+ reinforced ribbon is 2.5x stronger than leading gelling fibers.

WET TENSILE STRENGTH[6]



Tensile strength (N/cm)

Opticell Ag+ Reinforced Ribbon Dressing

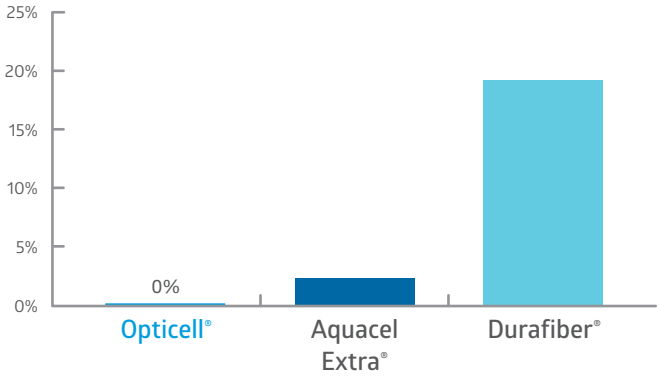
Helps to prevent maceration by wicking vertically

Opticell's Chytoform technology wicks fluid vertically, not laterally.[7] This can help reduce the risk of periwound maceration because wound fluid will not migrate across the dressing to reach this vulnerable skin.

Reduces dressing change frequency

Opticell's proprietary Chytoform technology delivers exceptional absorbency which can help reduce dressing change frequency. Consequently, patients are subjected to fewer dressing changes, wound bed disruption is minimized and treatment costs may be reduced.

LATERAL WICKING STUDY[7]



Average % distance solution laterally wicks past petri dish

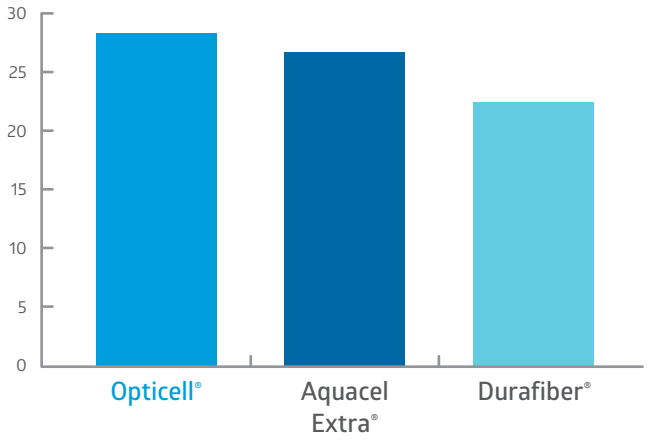
AN OPTIMAL HEALING ENVIRONMENT.

Manages moisture and helps promote autolytic debridement

Opticell's unique gelling action helps manage drainage and aids in the removal of non-viable tissue from the wound, trapping it for later removal at the dressing change. This natural, autolytic debridement is gentle on the wound and promotes a moist wound healing environment. Opticell fiber dressing is a market leader in absorbency. A recent study compared Opticell's absorptive capabilities to our competitors' dressings.[6]

Opticell Ag+ helps control minor bleeding.

ABSORPTION STUDY RESULTS[8]



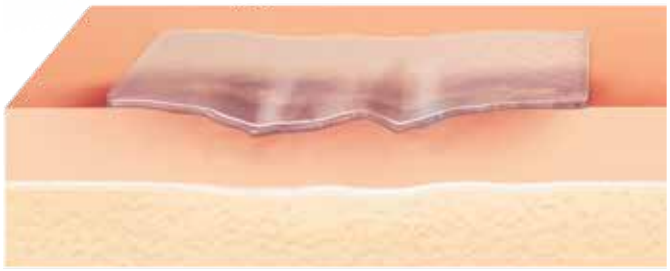
Average Fluid Absorbed (g/100cm²)

Based on in-vitro testing, Opticell had the highest average absorbency of the three dressings tested

Conforms to the wound surface

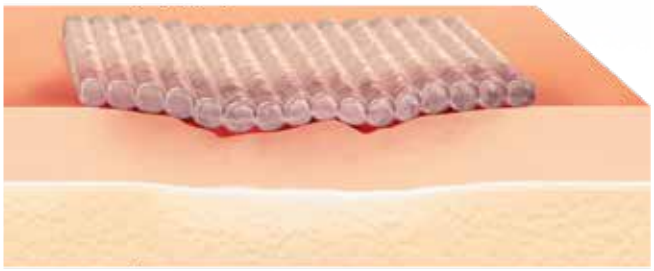
When moistened, Opticell's absorbent fibers transform into a conformable gel. This enables Opticell to effectively manage drainage and remove non-viable tissue. Opticell's conformable and low profile design provides intimate contact with the wound surface. Dressings with stitching, on the other hand, exhibit a ridging effect that can limit wound contact.

Opticell (Chytoform)



The smooth, thin and conformable profile provides for intimate contact with the wound.

Competition (Stitched Gelling Fiber)



The ridges in the dressing may lead to an uneven wound contact surface.

VERSATILITY.

Indicated for a wide variety of wounds

Opticell is uniquely versatile because it can be used on wounds of all drainage levels. Opticell may be pre-moistened for effective use on dry or lightly draining wounds.

Promotes gentle, pain-free removal

With Opticell's superior strength and unique gelling properties, application and one-piece removal is gentle on wounds and virtually pain-free for patients.

ORDERING INFORMATION.

Opticell Ag+ Gelling Fiber Wound Dressing with Antibacterial Silver and Chytoform Technology

Item No.	Description	Pkg
MSC9822EP	Opticell Ag+, 2 x 2" (5.1 x 5.1 cm), Sheet Dressing	100/cs, 10bx/cs, 10ea/bx
MSC9845EP	Opticell Ag+, 4 x 5" (10.2 x 12.7 cm), Sheet Dressing	50/cs, 5bx/cs, 10ea/bx
MSC9866EP	Opticell Ag+, 6 x 6" (15.2 x 15.2 cm), Sheet Dressing	50/cs, 10bx/cs, 5ea/bx
MSC98812EP	Opticell Ag+, 8 x 12" (20.3 x 30.5 cm), Sheet Dressing	50/cs, 10bx/cs, 5ea/bx
MSC9818R	Opticell Ag+, 0.75 x 18" (1.9 x 45.7 cm), Reinforced Ribbon Dressing	50/cs, 10bx/cs, 5ea/bx

View instructional videos at www.medline.com/awcvideos

Opticell Gelling Fiber Wound Dressing with Chytoform Technology

Item No.	Description	Pkg
MSC7822EP	Opticell, 2 x 2" (5.1 x 5.1 cm), Sheet Dressing	100/cs, 10bx/cs, 10ea/bx
MSC7844EP	Opticell, 4.25 x 4.25" (10.8 x 12.8 cm), Sheet Dressing	50/cs, 5bx/cs, 10ea/bx
MSC7866EP	Opticell, 6 x 6" (15.2 x 15.2 cm), Sheet Dressing	50/cs, 10bx/cs, 5ea/bx
MSC7818R	Opticell, 0.75 x 18" (1.9 x 45.7 cm), Reinfroced Ribbon Dressing	50/cs, 10bx/cs, 5ea/bx

Contact your Medline representative, call 1-800 MEDLINE or go to www.medline.com for more information.

Medline Industries, Inc. Three Lakes Drive, Nortfield, IL 60093

FOLLOW US

Medline United States
1-800-MEDLINE (633-5463)
medline.com | info@medline.com

Medline Canada
1-800-396-6996
medline.ca | canada@medline.com

Medline México
01-800-831-0898
medlinemexico.com | mexico@medline.com

REFERENCES 1. Okamoto Y et al. Analgesic effects of chitin and chitosan carbohydrate polymers [serial online]. August 15, 2002. 2. Honglue T et al. Quaternized chitosan as an antimicrobial agent: antimicrobial activity, mechanism of action and biomedical applications in orthopedics. International Journal of Molecular Sciences [serial online]. January 2013. 3. Rabea, et al. Chitosan as antimicrobial agent: applications and mode of action. biomacromolecules [serial online]. December 2003. 4. Chung MJ, et al. Anti-inflammatory effects of low-molecular weight chitosan oligosaccharides in IgE-antigen complex-stimulated RBL-2H3 cells and asthma model mice. Int Immunopharmacol. 2012. 5. Q He et al. Positive charge of chitosan retards blood coagulation on chitosan films. J Biomaterial Applications. May 2013. 6-8. Data on file.

SURFACE AREA MEMORY DEMONSTRATION PANEL.

Opticell® AG+

1. Place a 2" x 2" Opticell dressing in the square above.
2. Pour 5 mL of saline, saturating the whole surface of the dressing.

Observations: As Opticell absorbs fluid, it maintains its size better than Aquacel Extra.

Aquacel Extra®

1. Place a 2" x 2" Aquacel Extra dressing in the square above.
2. Pour 5 mL of saline, saturating the whole surface of the dressing.

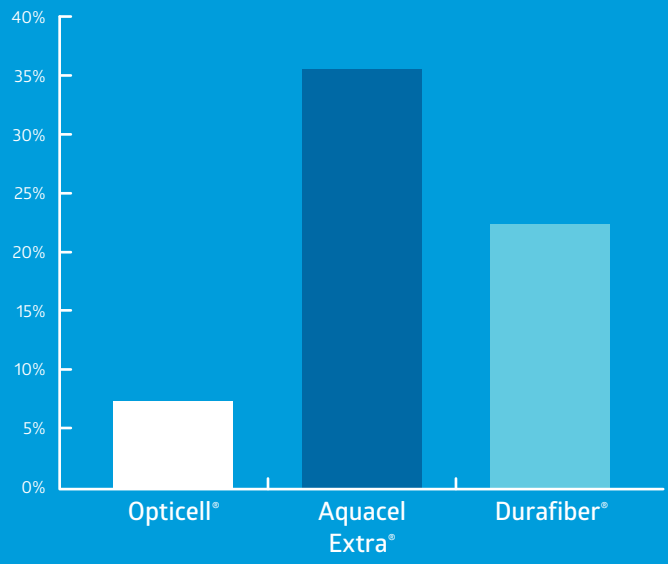
Observations: Fluids can reduce the Aquacel Extra dressing's surface area by more than 30%.

Opticell's surface area memory (SAM) **promotes complete contact** with entire wound surface.

RETAINING ITS SHAPE AND SIZE TO MAINTAIN COMPLETE WOUND COVERAGE.

Opticell won't shrink under pressure! Opticell retains its original size and shape better than the competition.[7]

SURFACE AREA MEMORY (SAM)[7]



Average Surface Area Reduction (%)

Based on in-vitro studies, Opticell shows significantly better surface area memory (SAM).

TEST IT OUT FOR YOURSELF

See reverse side for device comparison test.