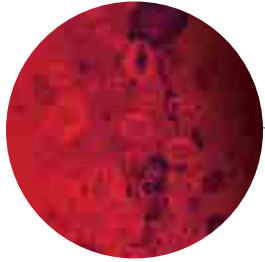


# CELOX<sup>TM</sup> TRAUMA GAUZE



for the control  
of moderate to  
severe bleeding



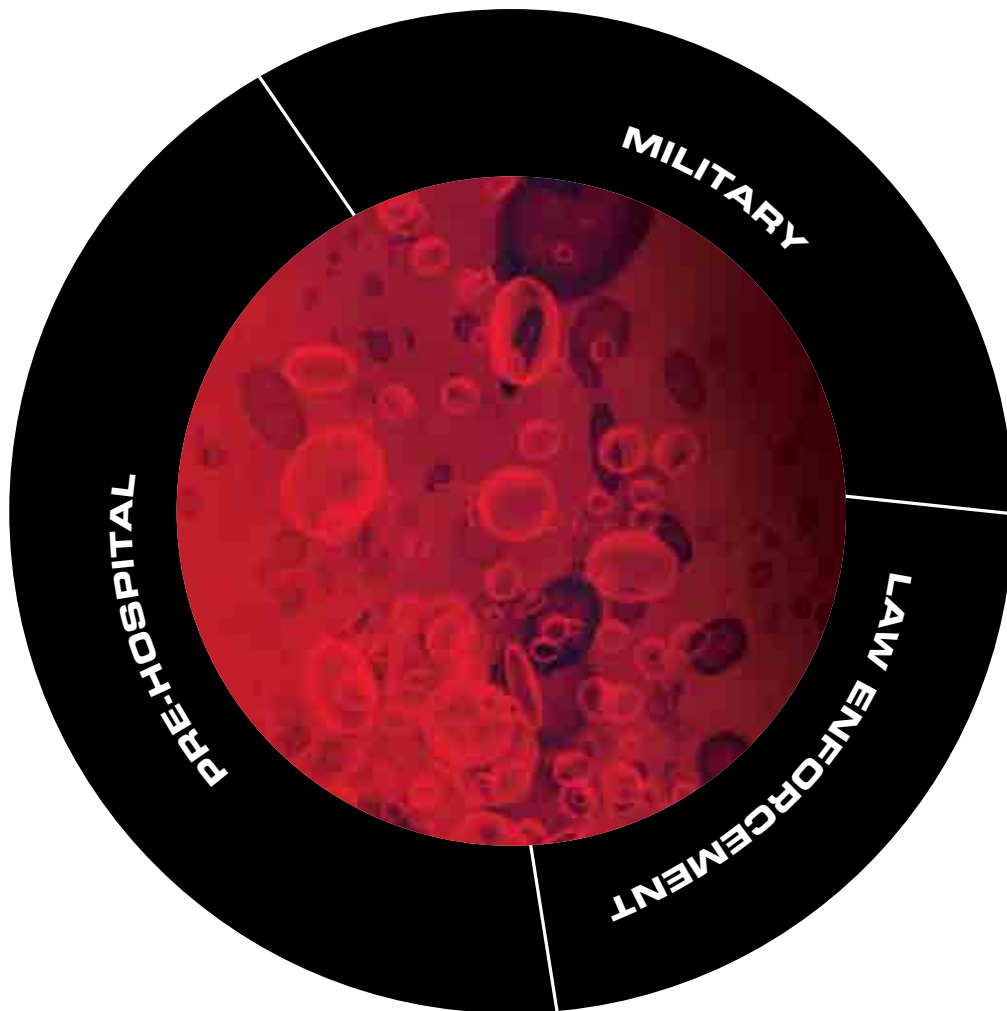
for the pre-hospital  
management of  
1st & 2nd  
degree burns

DUAL PURPOSE  
HEMOSTATIC GAUZE

# 2 INDICATIONS

## INDICATION

For moderate-to-severe bleeding



CELOX Trauma Gauze is indicated for moderate-to-severe bleeding. This product controls bleeding by reacting with red blood cells to form a robust clot in approximately 30 seconds. One dressing can absorb as much as 266 mL of blood, and is intuitive, easy to use, and safe for the patient.

# 1 PRODUCT

## INDICATION

For 1st and 2nd degree burns



CELOX Trauma Gauze is also indicated for first- and second-degree burns. As a burn dressing, this product cools and protects the skin through its ability to transform into a gel-like material once saturated with water or saline solution. One dressing can absorb as much as 430 mL of water or 320 mL of saline solution. The dual-purpose CELOX Trauma Gauze potentially replaces multiple products by providing two-in-one functionality, and freeing up valuable space in a medic's first aid kit.

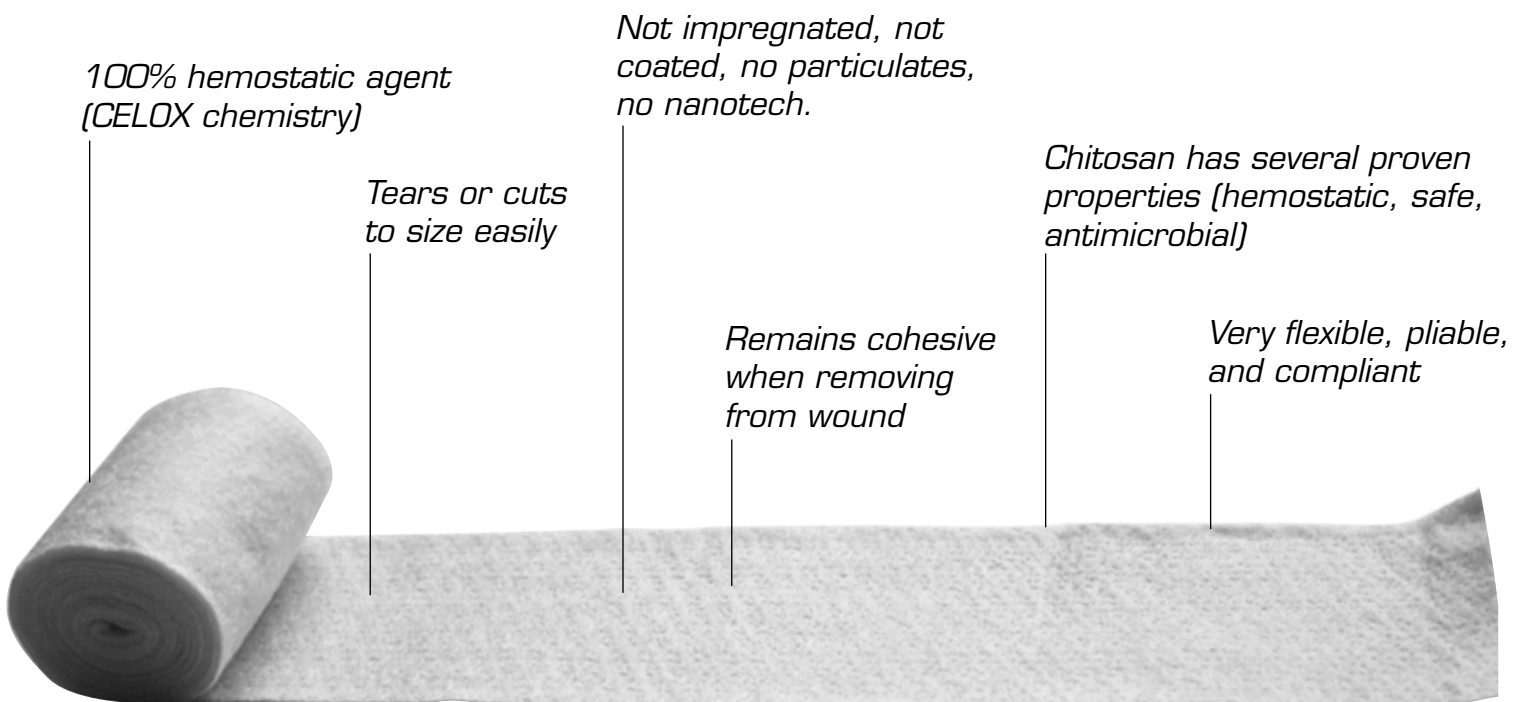
# CELOX<sup>TM</sup> TRAUMA GAUZE

## DESIGNED AND CREATED TO MEET THE NEEDS OF ARMED FORCES AND EMERGENCY SERVICES PERSONNEL

CELOX Trauma Gauze is a new dual-purpose hemostatic gauze used to control traumatic bleeding and cool and protect first- and second-degree burns. The product was designed to effectively meet the needs of the armed forces and emergency services personnel who are often working in the field with limited medical supplies.

CELOX Trauma Gauze is composed entirely of CELOX's chitosan chemistry. Unlike some hemostatic gauze products on the market, CELOX Trauma Gauze is not impregnated or coated with a hemostatic agent. Instead the fibers that make up the gauze are the actual hemostatic. The benefit is that 100% of the gauze material is used to treat the wound and not just act as a delivery system for the hemostatic agent.

The new product uses a proprietary manufacturing process to create a soft, compliant and hemostatic gauze that is similar to the look and feel of standard cotton gauze and tears or cuts easily to size. CELOX Trauma Gauze is the newest addition to the CELOX line of temporary traumatic wound treatments.





*510(k) indicated for severe bleeding*

*Very absorbent (266mL of blood per one dressing)*

*510(k) indicated for 1st and 2nd degree burns*

*For burns: cools burn when saturated with fluid*



*For burns: can use as a wound contact dressing under gauze wrap during transport*

*Very absorbent (430mL of water or 320mL of saline solution per one dressing)*

# ABOUT CELOX

CELOX™ is a high performance chitosan-based hemostatic designed to stop lethal bleeding fast. It is easy to use, extremely effective, and safe (is a CE Marked Class III Medical Device). CELOX comes in four different delivery systems, providing a commitment to aiding the caregiver in treating a variety of difficult and deep wounds. It also does not generate heat and will not burn the casualty or caregiver.

CELOX works independently of the body's normal clotting processes. Its clotting ability has been proven to work in hypothermic conditions and in the presence of common anticoagulants such as Coumadin and Heparin.

## HOW CELOX WORKS



When placed directly into a bleeding wound and subjected to pressure, the positively charged CELOX cross-links with negatively charged red blood cells, forming a sticky pseudo clot that blocks blood flow. This clot sticks well to moist tissue to plug the bleeding site.

CELOX does not set off the normal clotting cascade, it only clots the blood it comes directly into contact with. CELOX also does not set off a blood clotting response which would lead to clots being formed at a distance to the product.

## CHITOSAN

CELOX is made of chitosan, a compound derived from shrimp shells. Chitosan has proven antimicrobial properties and is not procoagulant. Chitosan is broken down and absorbed through normal metabolic pathways and has an extensive history of use in vascular closure and in human cardiac surgery.

CELOX has a three year history of use in emergency and military first aid with no reported adverse incidents. An external review was commissioned on the safety of CELOX's ingredients in the body and concluded that CELOX was safe to use internally in surgery and that residual quantities presented no risk.

# WHY CELOX

- Proven to control arterial bleeding within minutes
- Works in hypothermic conditions
- FDA cleared to work on anticoagulated blood
- No heat – no burning
- Sterile, waterproof packaging
- Easy to irrigate from wound
- Applied using basic first aid skills
- CELOX is comprised of Chitosan which has several proven properties (hemostatic, safe, antimicrobial) - a full CELOX Safety Study is available online at: [www.sammedical.com/celox](http://www.sammedical.com/celox)

“Chitosans have widespread applications, have been widely studied in the biomedical field, and are highly biocompatible. Celox [derived from Chitosan] itself, has FDA [clearance] (ie. 501(k)), Class III CE Mark, and a NATO stock number as a hemostatic agent in the emergency and battlefield settings in which anecdotal reports of its use have been highly encouraging. This is supported by in vivo experimental work showing 100% effectiveness in an industry standard model of lethal groin hemorrhage in swine.”

An excerpt from:

Millner R, MD; Lockhart A; Bird H; Alexiou C, PhD. A New Hemostatic Agent: Initial Life-Saving Experience With Celox (Chitosan) in Cardiothoracic Surgery. *The Annals of Thoracic Surgery* 2009; 87:e13-e14.

## CELOX IS ALSO:

### CELOX™



#### THE ORIGINAL COMPRISED OF ABSORBENT HEMOSTATIC GRANULES

The “original” with absorbent hemostatic granules that can be poured directly into a wound. This presentation provides the most diverse set of uses.

**CE Approved**

NSN# 6510-01-549-5980

#### Available Sizes

CELOX™ 15g Pouch  
CELOX™ 15g CE Pouch  
CELOX™ 35g Pouch  
CELOX™ 35g CE Pouch

### CELOX™-A



#### APPLICATOR DELIVERY SYSTEM FOR CELOX AGENT TO DEEP PENETRATING WOUNDS

The CELOX-A applicator and plunger delivery system makes it possible for the hemostatic agent to reach deep into small penetrating wounds, getting straight to the source of the bleeding.

**CE Approved**

#### Available Sizes

6g (0.2oz) Applicator/Plunger Set

# CELOX™ TRAUMA GAUZE

CELOX print and video instructions available at:  
[www.sammedical.com/celox](http://www.sammedical.com/celox)

Videos are also available on



## PRODUCT INFORMATION

### Available Sizes:

One Gauze Strip:  
3IN x 6FT (7.6CM x 1.8M)

### Part Number:

C43000

### Specs:

Package Dimensions:  
7IN x 4.3IN  
Shelf Life: 3 years

## PUBLICATIONS

Millner R, Lockhart AS, Bird H, Alexiou C. **A New Hemostatic Agent: Initial Life-Saving Experience With Celox (Chitosan) in Cardiothoracic Surgery.** The Annals of Thoracic Surgery 2009;87:e13-e14.

Hildwine F. **JEMS HotProducts 2009.** JEMS Magazine. June 2009:53.

Littlejohn LF, Devlin J, Johnson A, Kircher S. **Comparison of four hemostatic agents, CELOX™-A, ChitoFlex®, WoundStat™ and Combat Gauze™, versus standard gauze dressing in control of extremity hemorrhage in a limited access swine model of penetrating combat trauma.** Presented at the Special Operations Medical Association 21st Annual Conference. 2008.

Kozen BG, Kircher SJ, Henao J, Godinez FS, Johnson AS. **An Alternative Hemostatic Dressing: Comparison of CELOX, HemCon, and QuikClot.** Academic Emergency Medicine 2008;15(1):74-81.

Dickinson E. **Clotting Agents: Here's the scoop on these lifesaving tools.** Law Officer. March 2008:32-36.

Smith M. **EMS Expo 2007: Top Product Picks.** EMS Magazine. January 2008:36-45.

Khemsurov M. **The Seafood Bandage: A new powder made from shrimp stops serious bleeding-fast.** Popular Science. July 2006:41.

## ABOUT SAM MEDICAL PRODUCTS



SAM Medical Products® is a developer and manufacturer of innovative medical products used for emergency, military, and hospital care. Our products include the widely used SAM® Splint, SAM Pelvic Sling™, Soft Shell® Splint, CELOX™ line of hemostatic agents, BursaMed® line of shear and friction relieving dressings, and Blist-O-Ban® blister prevention bandages. For more than 25 years, SAM Medical Products has represented innovation and quality to the medical professional. More information can be found on our website at [www.sammedical.com](http://www.sammedical.com).

**SAM MEDICAL**  
PRODUCTS®  
[sammedical.com](http://sammedical.com)

[customerservice@sammedical.com](mailto:customerservice@sammedical.com)  
P.O. Box 3270 Tualatin, OR 97062  
800.818.4726 (USA) Tele  
503.639.5425 (USA) Fax