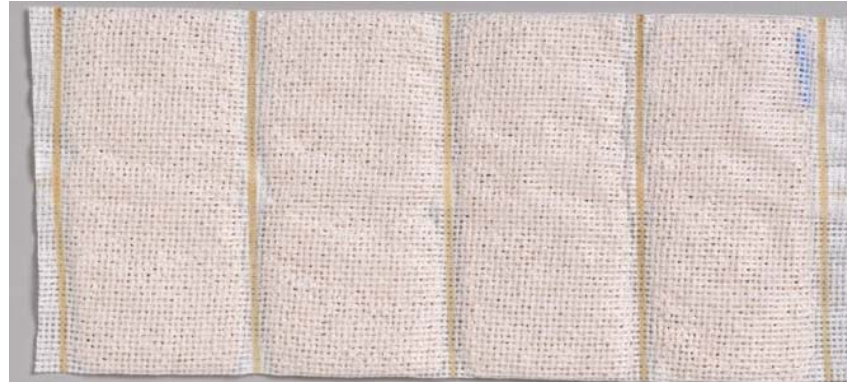


# QuikClot<sup>®</sup> ACS+<sup>™</sup>

## Application and Training Guide

# QuikClot ACS<sup>+</sup> Advanced Clotting Sponge

**Adsorbent Hemostatic Agent**  
**Controls moderate to severe blood loss by promoting coagulation**

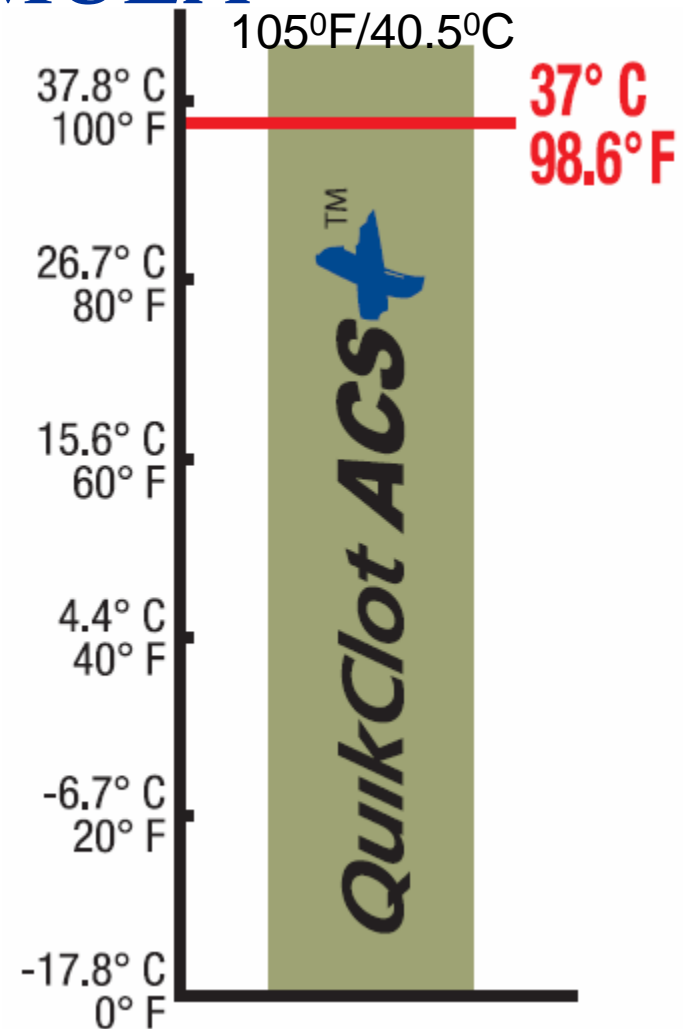


## What is QuikClot<sup>®</sup>, how does it work, and why use it?

- QuikClot<sup>®</sup> ACS+<sup>™</sup> acts as a selective molecular sponge. It is biologically inert, inorganic, and traps water molecules by hydrogen bond formation in a molecular cage.
- QuikClot<sup>®</sup> causes rapid localized coagulation and the formation of a stable blood clot in a variety of wounds. It does not absorb into the body, and is safe to leave in the wound until further medical care is available.
- QuikClot<sup>®</sup> controls bleeding faster than conventional methods.

## COOL FORMULA


The re-engineered cooler formula gives the care giver an effective means to control bleeding using this proven technology. Typical maximum temperature measured *in vivo*:  $105^{\circ}\text{F}/40.5^{\circ}\text{C}$



# How to use QuikClot<sup>®</sup> ACS+<sup>™</sup>

# Read Package Directions before Use.

(Directions are on the back of the product package)

 **Single Use Only**

**STERILE R**

◀ TEAR HERETEAR HERE ▶

FOR USE BY TRAINED EMERGENCY RESPONDERS

**! WARNINGS:** Sterility not guaranteed if package is damaged, open, or contents are loose. Discard packages that are damaged, open, loose, or expired (see date stamp below).

**FOR TEMPORARY EXTERNAL USE**


**DIRECTIONS – READ BEFORE USE**

1. Tear outer package open at tabs. See Fig. 1.
2. Using gauze, remove excess blood with a wiping motion and pack wound with mesh bag(s). More than one mesh bag may be required for treatment of large wounds and/or multiple wounds. Use enough mesh bags to completely fill the wound.
3. Apply direct pressure over mesh bag(s) in the wound for a minimum of 3 minutes or until bleeding stops. See Fig. 2.
4. Product will feel warm. Wrap and tie bandage to maintain pressure.
5. Seek **MEDICAL CARE** immediately. Show the empty pack to medical personnel.


**PRODUCT REMOVAL**

1. Gently remove mesh bag(s) from the wound.
2. Proceed with normal irrigation and/or suction until all loose beads, if any, are removed.

Note: Device contains a blue X-ray detectable element.  
Not for surgical use.




**Fig. 1**




**Fig. 2**


**Manufactured by: Z-Medica Corporation**  
4 Fairfield Blvd., Wallingford, CT 06492 USA  
Tel: +1-203-294-0000, Fax: +1-203-294-0688



**Use By (year-month)**



**LOT**



**EC REP**

Emergo Europe  
Molenstraat 15  
2513 BH, The Hague  
The Netherlands

## Take Proper Body Substance Isolation (BSI) procedures.



## Check your local policies, procedures and protocols for use of hemostats\*.

### Sample of suggested language to be used in SOP

**SUBJECT:** QUIKLOT®1st Response™ and QUIKLOT® ACS+™ (Advanced Clotting Sponge) HEMOSTATIC AGENT

I. **PURPOSE:** The purpose of this Standard Operating Procedure is to define guidelines governing the carrying and use of the QUIKLOT® products.

II. **SCOPE:** This procedure shall apply to all \_\_\_\_\_ personnel who carry and/or utilize the QUIKLOT® products.

III. **DISCUSSION:** As a first responder, you may be required to render medical aid to traumatic wound victims. Blood loss is the primary cause of death in traumatic wound victims.

QUIKLOT® products are provided to \_\_\_\_\_ as a tool to enhance effectiveness of medical aid to victims of traumatic wounds.

#### IV. **DEFINITIONS:**

**A. QuikClot® Hemostatic Agent-** A sterile, traumatic wound treatment that rapidly arrests high-volume blood loss.

in large wounds, arresting the hemorrhage. QUIKLOT® products affect coagulation in moderate-to-severe wounds, including high-volume venous and arterial bleeding.

**B. Hemorrhage-** High-volume blood loss.

**C. Coagulation-** Clotting of blood.

\*Please contact Z-Medica if you require further assistance.



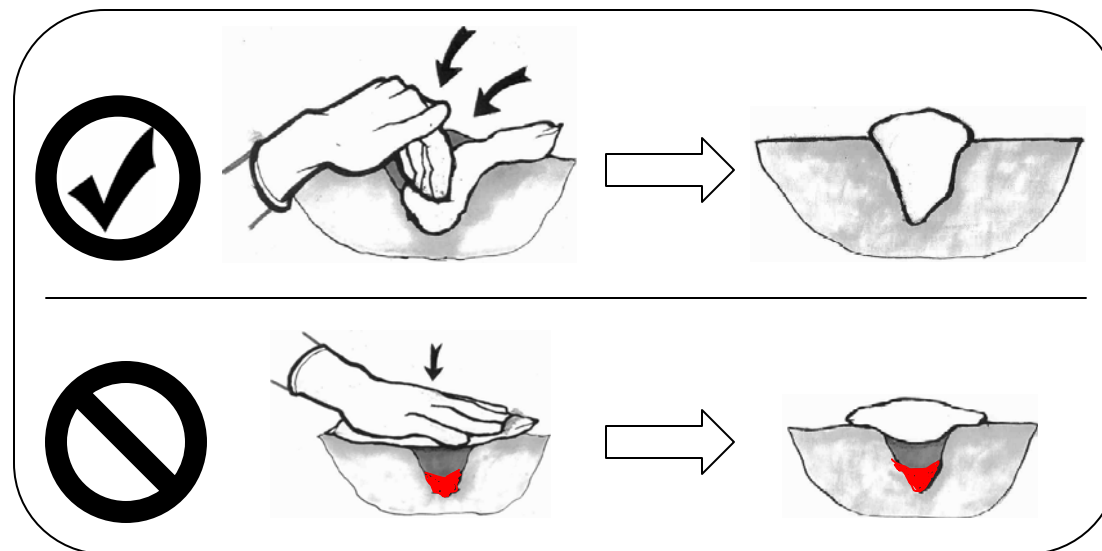
Remove excess pooled blood from wound, while preserving any clots already in the wound if possible.



According to the wound size, the QuikClot® ACS+™ bag can be twisted to conform to the wound.



Pack QuikClot<sup>®</sup> ACS+<sup>™</sup> tightly and directly onto bleeding source. More than one may be required. Product may feel warm (typically 105°F / 40.5°C).



Quickly apply pressure until bleeding stops.  
Suggested time 3 to 5 minutes of continuous pressure.



Leave QuikClot® ACS+™ in place. Wrap to secure the product in the wound.

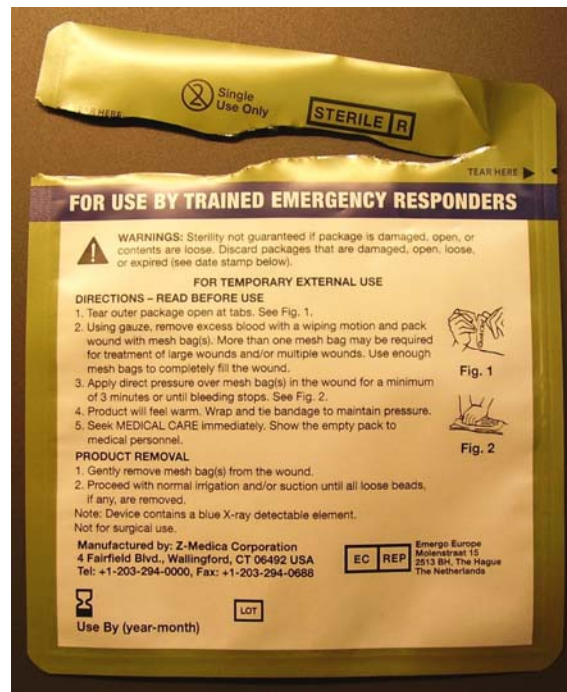


## Patient Transport

- Do not remove bandage or QuikClot<sup>®</sup>. Elevate and evaluate as needed.
- Transport to additional medical care as soon as possible.



Make sure empty package is attached to or sent with the patient - removal instructions are on the back of package for emergency room staff.



## Medical Facility

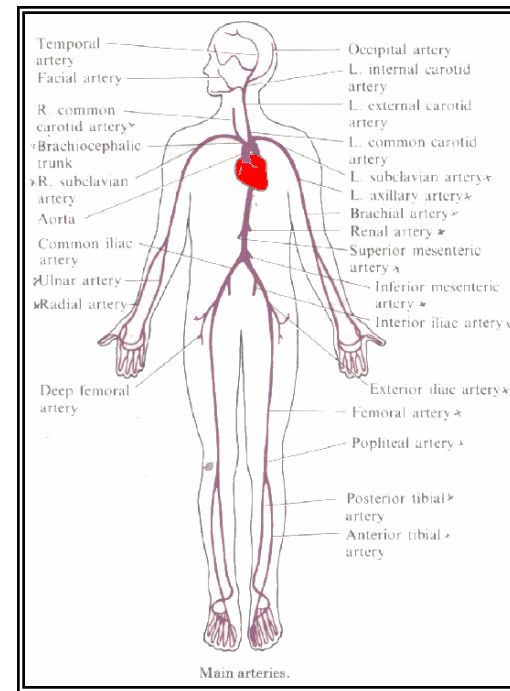
### Product Removal:

1. Gently remove mesh bag(s) from wound.
2. If any beads are present in the wound they may be removed by normal irrigation and/or suction until all loose beads are removed.

Device contains a blue X-ray detectable element.

## Warnings

- Not for internal use
- Do not use on sucking chest wounds
- Do not use on exposed bowels
- Keep out of airway and eyes



# Feedback

We listen to your feedback. Please fill out an evaluation form

Z-MEDICA <i>The greatest privilege is to make a difference.</i>		<b>QuikClot ACS+</b> Advanced Clotting Sponge	
Evaluation Sheet for Use of QuikClot ACS+™ & 1 <sup>st</sup> Response Products			
<b>Evaluator Information</b>			
Name & Rank: _____			
Company/Organization: _____			
City, State, Zip, Country: _____			
Phone: _____	Email: _____	Date of Use: _____	
<b>Description of Injury</b>			
Location on Body: _____			
Size and Shape: _____			
Arterial, Venous, Capillary, Unknown: _____			
Source/Cause of Wound: _____			
<b>Treatment Prior to the Use of QuikClot® Hemostat</b>			
Length of time between injury and initial treatment: _____			
Treatment attempted before QuikClot® hemostat: _____			
Result of treatment: _____			
Additional Information/Comments: _____			
<b>Application of QuikClot® Hemostat</b>			
Estimate blood pressure at time of application: _____			
Describe application of QuikClot® Hemostat: _____			
Wipe away blood first? _____			
Amount used: _____			
Action immediately after application: _____			
Degree to which QuikClot® hemostat controlled bleeding: _____			
Time to control: _____			
Estimated blood pressure after application: _____			
<b>Fluid Resuscitation</b>			
Previous to or Following QuikClot® Hemostat Application: _____			
Effect, if any: _____			
<b>Follow Up</b>			
Follow up done: _____			
Complications: _____			
Benefits: _____			
<b>Overall Evaluation</b>			
Did QuikClot® Hemostat improve outcome? _____			
Would you use QuikClot® Hemostat again? _____			
Additional Information/Comments: _____			
Please email this form to <a href="mailto:info@z-medica.com">info@z-medica.com</a> or mail, fax to the address or number below. Thank you. We appreciate your feedback.			
Z-Medica Corporation 4 Fairfield Blvd., Wallingford, CT 06492 Tel: 1-203-294-0000, Fax: 1-203-294-0688, <a href="http://www.z-medica.com">www.z-medica.com</a>			

Note: Form can be found on CD or contact Z-Medica