



# Oxides for Wound Healing and Body Repair

Tech ID: 25665 / UC Case 2006-081-0

## BRIEF DESCRIPTION

A homogeneous composition of oxide materials prepared to modulate hemostasis and facilitate the blood coagulation, accelerating bone generation and assisting in wound healing and tissue repair.

## BACKGROUND

Treatment of severely bleeding wounds can require immediate attention to bring the bleeding under control. Severe bleeding poses a very real risk of death to the casualty if not treated quickly. When a laceration or penetrating trauma (e.g., knife or gun wound) is severe enough or involves critical arteries or veins, the bleeding must be slowed immediately or irreversible damage to organs and mortality can result. In recent years, scientists have attempted to reduce blood flow by applying dehydrated zeolite material to the bleeding site in order to induce hemostasis through dehydration of the wounded area and induction of a blood clot formation. The major disadvantage of this technique is the excessive heat generated at the injured site. There is an urgent need to minimize the heat generated by the hemostatic materials upon contact with blood. Of particular interest are such hemostatic compositions that can be rapidly and safely applied in an emergency situation, such as on the battlefield or at the scene of an accident, without the need for intense training or equipment.

## DESCRIPTION

A homogeneous composition of oxide materials prepared to modulate hemostasis and facilitate the blood coagulation, accelerating bone generation and assisting in wound healing and tissue repair.

## ADVANTAGES

- Reduced amount of heat generated by the hemostatic agent
- Improved blood-clotting efficiency (it is able to stop an arterial hemorrhage)
- Easy to apply, even in an emergency situation
- The hemostatic agents can be packaged in a medical gauze, providing a simple and cost effective device

## APPLICATIONS

- Blood clotting
- Wound healing

## PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,326,995	05/03/2016	2006-081

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## OTHER INFORMATION

### KEYWORDS

indpharma, oxides, coagulation

### CATEGORIZED AS

- [Biotechnology](#)
- [Other](#)

### RELATED CASES

2006-081-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- ▶ Hybrid Supercapacitor and Battery System
- ▶ Hemostatic Compositions And Methods Of Use
- ▶ Mesocellular Oxide Foams as Hemostatic Compositions and Methods of Use

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