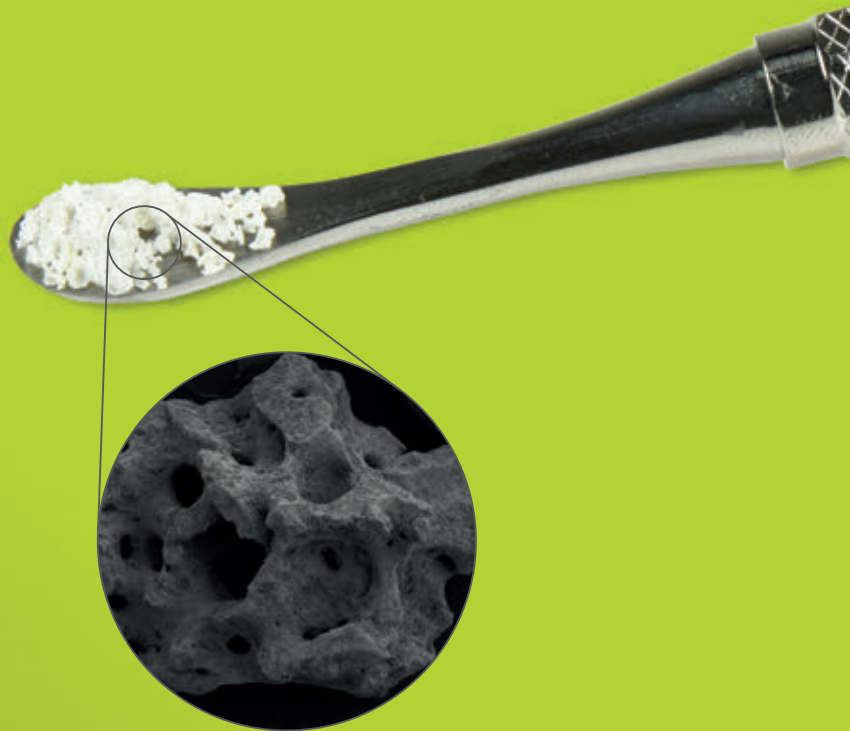




Biomaterials@Straumann®  
Because one option is not enough.

botiss cerabone®

NATURAL BOVINE BONE GRAFTING MATERIAL



cerabone® provides dependable stability and strength and predictably integrates into newly formed bone ensuring volume maintenance and a strong, long-lasting matrix to support the successful placement of dental implants.

## FEATURES AND BENEFITS

<b>Osteoconductivity</b>	High porosity and rough surface morphology account for the osteoconductive properties. The natural bone structure of cerabone® with interconnected pores facilitates the adhesion and invasion of bone forming cells and results in complete integration of the implant due to the ingrowth of cells and blood vessels.
<b>Volume stability</b>	cerabone® undergoes superficial resorption only. The granules provide dependable stability and predictably integrate into newly formed bone. This ensures volume maintenance and a strong long lasting matrix for successful placement of dental implants.
<b>Safety</b>	The proprietary manufacturing process of cerabone® is based on high temperature heating (> 1200 °C) that completely removes and eliminates all organic components and albuminous impurities (proteins, antigenic components, potential bacteria, viruses and prions). Gamma-irradiation ensures final sterility of cerabone®.
<b>Biocompatibility</b>	cerabone® demonstrated biocompatibility in more than 650,000 successful augmentations. The high temperature production process eliminates all organic components.
<b>Hydrophilicity</b>	The interconnected pores and rough surface morphology of cerabone® facilitate excellent hydrophilicity and support adhesion of proteins and signaling molecules from the blood to further improve the fast bony integration of cerabone®.
<b>Easy handling and application</b>	cerabone® particles absorb liquid quickly and adhere to each other after mixing, thereby facilitating handling and application into the defect.

## PROPERTIES

Attribute	Description
Origin	Bovine cancellous bone from New Zealand cattle
Composition	Calcium phosphate (100% pure hydroxyapatite, mineral phase)
Porosity	65-80%
Mean pore size	600-900 µm
Degradation kinetics	Very slow superficial degradation of particles, osseous integration of particles into newly formed bone matrix
Healing/integration time	6-9 months
Storage temperature	5-25 °C
Shelf life	3 years



Courtesy of Dr. Viktor Kalenchuk, Chernivtsi/Ukraine

## APPLICATION AND HANDLING

### Opening

cerabone® is delivered sterile and must be used immediately after opening in an aseptic environment.

### Rehydration

Rehydration of cerabone® in blood from the defect site or saline solution is not required but recommended, as it facilitates handling and application of the particles.

### Application

- Avoid compressing the particles during application. Non compacted particles leave space for blood vessel ingrowth and formation of new bone matrix.
- Fill the defect as completely as possible.
- Ensure maximum contact between the graft material and viable bone in a well vascularized area.
- It is recommended using a membrane approved for such augmentation procedures.

### Wound closure

Ensure primary wound closure by tension-free repositioning and suturing of the flap.

### Healing time and re-entry

The appropriate healing time is patient- and site-dependent and has to be decided by the clinician based on the assessment of the patient's individual situation. A minimum healing period of six months is recommended before re-entry to ensure stable integration of particles.

### Particle size

Use of small granules gives better surface contouring, especially in the esthetic region. Use of large particles enables a better revascularization of larger defects.

### Mixing with maxgraft® (allograft)

Mixing of cerabone® with allogeneic bone (maxgraft®) combines the advantages of both materials; the biological potential of maxgraft® and the long-term stability of cerabone® lead to fast regeneration of vital, strong bone.

### Mixing with autologous bone

Mixing of cerabone® with autologous bone adds a biological activity (osteoinductive and osteogenetic properties of autologous bone) and supports faster regeneration and improved formation of new bone.

### Recommended for

cerabone® is recommended for implantology, oral surgery, periodontology and craniomaxillofacial surgery (CMF):

- Sinus floor elevation
- Horizontal augmentation
- Ridge preservation
- Intraosseous defects
- Peri-implant defects
- Socket preservation
- Furcation defects

### Available in the following sizes

Code	Description	Product
BO-1510	0.5-1.0 mm, 1x 0.5 cc (ml)	botiss cerabone® granules
BO-1511	0.5-1.0 mm, 1x 1.0 cc (ml)	
BO-1512	0.5-1.0 mm, 1x 2.0 cc (ml)	
BO-1515	0.5-1.0 mm, 1x 5.0 cc (ml)	
BO-1520	1.0-2.0 mm, 1x 0.5 cc (ml)	
BO-1521	1.0-2.0 mm, 1x 1.0 cc (ml)	
BO-1522	1.0-2.0 mm, 1x 2.0 cc (ml)	
BO-1525	1.0-2.0 mm, 1x 5.0 cc (ml)	



For further informations please visit  
[www.straumann.com](http://www.straumann.com)

Distributed by

**International Headquarters**

Institut Straumann AG  
Peter Merian-Weg 12  
CH-4002 Basel, Switzerland  
Phone +41 (0)61 965 11 11  
Fax +41 (0)61 965 11 01  
[www.straumann.com](http://www.straumann.com)

Legal manufacturer

**botiss biomaterials GmbH**

Hauptstr. 28  
15806 Zossen, Germany  
Tel.: +49 (0)33769 / 88 41 985  
Fax: +49 (0)33769 / 88 41 986  
[www.botiss.com](http://www.botiss.com)  
[www.botiss-dental.com](http://www.botiss-dental.com)  
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