



MAGGI Biotechnology
ΜΑΓΓΙ ΒΙΟΤΕΧΝΟΛΟΓΙΑ

Bone tissues and membranes for the regeneration in dentistry

TESSUTO OSSEO

TECHNOLOGY AND EXPERIENCE

Bone tissues of natural origin from Spanish equines

Maggi srl has been operating since 1995 in the field of deantigenization of equine bone tissues. This type of material is increasingly used in the field of bone regeneration supported by numerous studies ^{3,4}



It has a morphological structure and a chemical composition very similar to human bone tissue. ⁵

In the portion of the equine femur used to obtain the raw material, the morphology of the bone tissue is comparable to that of humans.



There are no transmissible pathologies between equine and man.



The enzymatic-based deantigenization allows to keep intact the microstructure ⁶ of the bone crystal ensuring rapid osseointegration and timing physiological reabsorption within 12 months.



The raw material comes from horses of Spanish origin intended for food consumption human and controlled by the veterinary system and the competent authorities.



1 Hutmacher D.W, Schantz JT, Lam CX, Tan KC, Lim TC (2007). State of the art and future directions of scaffold-based bone engineering from a biomaterials perspective. *J Tissue Eng Regen Med*; 1(4): 245-60.

2 Al Ruhaimi, K. A. (2001). Bone graft substitutes: a comparative qualitative histologic review of current osteoconductive grafting materials. *International Journal of Oral & Maxillofacial Implants*, 16(1).

3 Nevins, M., Cappetta, E. G., Cullum, D., Khang, W., Misch, C., Ricchetti, P., ... & Kim, D. M. (2014). Socket preservation procedure with equine bone mineral: a case series. *International Journal of Periodontics & Restorative Dentistry*, 34.







4 Di Stefano, D. A., Greco, G. B., & Riboli, F. (2016). Guided Bone Regeneration of an Atrophic Mandible with a Heterologous Bone Block. *Craniofacial Trauma and Reconstruction*, 9(01), 088-093.

5 Hillier, M. L., & Bell, L. S. (2007). Differentiating human bone from animal bone: a review of histological methods. *Journal of forensic sciences*, 52(2), 249-263.

6 Bedini, R., Meleo, D., Pecci, R., & Pacifici, L. (2008). The use of microtomography in bone tissue and biomaterial three-dimensional analysis. *Annali dell'Istituto superiore di sanità*, 45(2), 178-184.

OSTEOGEN

LYOPHILIZED GRANULAR BONE TISSUE

-  Decollagenated bone tissue
-  Easy to position thanks to its high hydrophilicity
-  Resorbable over a period of 6 - 12 months
-  °C Deantigenated by enzymatic system at 37 ° C ⁷
-  Sterilized with beta rays
-  Can be stored at room temperature for 5 years









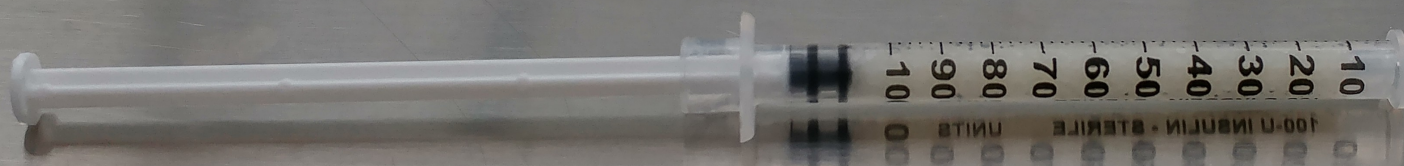
Product description	Particle size	Quantity/Volume	Code
Spongy granulate	0,5- 1 mm.	0,25 gr. / 0,5 cc.	OSD025S
		0,5 gr. / 1 cc.	OSD05S
		1 gr. / 2 cc.	OSD051S
		2 gr. / 4 cc.	OSD052S
Spongy granulate	1 - 2 mm.	0,5 gr. / 1,25 cc.	OSD105S
		1 gr. / 2,5 cc.	OSD101S
		2 gr. / 5 cc.	OSD102S
Cortico-cancellous granulate	0,5 - 1 mm.	0,5 gr. / 1 cc.	OSD05M
		2 gr. / 4 cc.	OSD20M

⁷ AN ENZYMATIC DEANTIGENATION PROCESS ALLOWS ACHIEVING PHYSIOLOGICAL REMODELING AND EVEN OSTEOPROMOTING BONE GRAFTING MATERIALS. Pagnutti, S. Maggi, D. A. Di Stefano, M. Ludovichetti Bioteck S.r.l., Arcugnano (VI), Italy Correspondence to:

OSTEOGEN GEL

LYOPHILIZED GRANULAR BONE PASTE








-  Decollagenated bone tissue
-  Ready for use
-  Resorbable over a period of 6 - 12 months
-  °C Deantigenated by enzymatic system at 37 ° C ⁷
-  Sterilized with beta rays
-  Can be stored at room temperature for 5 years



Product description	Particle size	Quantity/Volume	Code
Spongy granulate	0,5 - 1 mm.	0,5 gr. / 1 cc.	OSD05SG
Cortico-cancellous granulate	0,5 - 1 mm.	0,5 gr. / 1 cc.	OSD05MG

BIOPLANT BLOCKS

BONE TISSUE IN SPONGEOUS BLOCK

-  Natural bone tissue containing native collagen
-  After rehydration it becomes easily manipulated (milling, cutting, etc.)
-  Resorbable over a period of 8 - 12 months
-  It can be fixed with screws without pre-drilling
-  °C Deantigenated by enzymatic system at 37 ° C
-  Sterilized with beta rays
-  Can be stored at room temperature for 5 years



Product description	Dimensions	Volume	Code
Bioplant cancellous block	10 x 10 x 20 mm.	2 cc.	OST-01B
	20 x 20 x 10 mm.	4 cc.	OST-01
	20 x 15 x 8 mm.	2,4 cc.	OST-01D

BIOPLANT ELASTA

FLEXIBLE BONE PLATE



30% hydroxyapatite and 70% endogenous bone collagen exposed for partial demineralization



After rehydration it becomes flexible and can be cut



Resorbable in 2 - 4 months



It can be fixed with screws or pins without pre-drilling



Deantigenated by enzymatic system at 37 ° C



Sterilized with beta rays



Can be stored at room temperature for 5 years



Product description	Dimensions	Volume	Code
Flexible cancellous plate	25 x 25 x 3 mm.	1,9 cc.	OST-FS1
	40 x 40 x 3 mm.	4,8 cc.	OST-FS2
	30 x 20 x 3 mm.	1,8 cc.	OST-FS3
	50 x 25 x 3 mm.	3,7 cc.	OST-FS4
	50 x 50 x 3 mm.	7,5 cc.	OST-FS5
Flexible cancellous blocks	10 x 10 x 10 mm.	1 cc.	OST-FS8
	35 x 15 x 15 mm.	7,8 cc.	OST-FS6
Flexible cortical plate	25 x 25 x 2 mm.	1,2 cc.	OST-FC1

The use of a quality membrane is essential in many surgeries to achieve the result desired, both aesthetic and functional

Maggi srl has developed the EXAFLEX membrane in bilayer bovine pericardium. This membrane is ideal as a selective barrier due to its natural bi-layer composition with multi collagen fibers directional twisted type I



Excellent handling after rehydration



Totally resorbable in the long run



Resistant and easy to fix



The barrier effect is guaranteed 4 months after its deposition



100% biocompatible



Sterilized with beta rays



Can be stored at room temperature for 5 years



Product description

Dimensions

Code

Bovine pericardium membrane

25 x 25 x 0,2 mm.
30 x 30 x 0,3 mm.
30 x 40 x 0,3 mm.

EXF-01
EXF-02
EXF-06

Bovine pericardium membrane
for periodontology

14 x 25 x 0,2 mm.

EXF-03

