# **TISSUM**<sup>®</sup> Biomaterials

# **The Ideal Mineral Bone Substitute** for Bone Regeneration and the Preservation of Biological Spaces



# **TISSUM Hydroxyapatite**

Bovine hydroxyapatite is a mineral matrix derived from bovine hydroxyapatite, designed for bone substitution and guided bone regeneration. Authorized by A.N.M.A.T. PM-2312-1

Hydroxyapatite is a natural mineral that makes up the majority of human bone. In the quest for optimal bone regeneration, TISSUM Hydroxyapatite stands out as the definitive solution.

TISSUM Biomaterials' innovative low-temperature processing technology preserves the integrity of the bone mineral structure, replicating a microand macroporous architecture that resembles human bone. This ensures exceptional biocompatibility and osteoconductivity, creating an ideal scaffold for guided bone regeneration.

#### PRESENTATIONS

Code	Presentation	Particle sizes
66 BOS-EV N 0,25	0,25 g	(N) 210 - 1000 µm
67 BOS-EV N 0,5	0,5 g	(N) 210 - 1000 µm
68 BOS-EV N 1	1,0 g	(N) 210 - 1000 µm
94 BOS-EV G 0,5	0,5 g	(G) 1000 - 2000 µm
95 BOS-EV G 1	1,0 g	(G) 1000 - 2000 µm

# **OPTIMAL POROUS STRUCTURE**

- Allows vascularization and integration of bone tissue.
- · Facilitates the transport of nutrients and growth factors.

# SUPERIOR OSTEOCONDUCTIVITY

- Provides a perfect scaffolding for bone cell adhesion, proliferation, and differentiation.
- · Enables safe and effective new bone formation.

#### **EXCEPTIONAL BIOCOMPATIBILITY**

- · Minimizes the risk of inflammatory or immunogenic reactions.
- Integrates safely and naturally into the surrounding bone tissue.

#### **CONTROLLED RESORPTION**

- Gradually resorbs as new bone forms, being replaced by natural bone tissue.
- Features a slower absorption rate than collagen-based biomaterials, making it ideal for filling sites where volume preservation is required for extended periods.

# **CLINICAL APPLICATIONS**

- Bone cavity augmentation and filling
- Bone reconstruction and regeneration
- Post-tooth extraction bone regeneration with immediate implant placement

#### MICROGRAPH



Hydroxyapatite granule (100 µm)



Maxillofacial surgery

Alveolar filling

Periodontology

· Sinus lift

Hydroxyapatite pore (20 µm)