

# **Brief Summary**

MASTERGRAFT<sup>®</sup> Resorbable Ceramic Granules are indicated only for bony voids or gaps that are not intrinsic to the stability of the bony structure. MASTERGRAFT<sup>®</sup> Resorbable Ceramic Granules are to be gently packed into bony voids or gaps of the skeletal system (e.g., the posterolateral spine, pelvis, ilium, and/or extremities). These defects may be surgically created osseous defects or osseous defects created from traumatic injury to the bone. MASTERGRAFT<sup>®</sup> Resorbable Ceramic Granules provide a bone void filler that resorbs and is replaced with bone during the healing process.



MASTERGRAFT® Granules

#### **Chemical Composition**

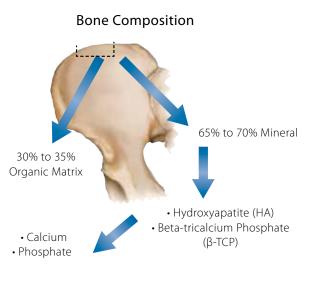
# Medical-grade Polyporous Resorbable Ceramic Granules

- » Granules are composed of:
  - 15% hydroxyapatite (HA).
  - 85% beta-tricalcium phosphate ( $\beta$ -TCP).



#### Why Are the Granules Composed of 15% HA and 85% β-TCP?

- » To provide an osteoconductive porous scaffold composed of minerals similar to those found in bone.
  - Both HA and β-TCP contain calcium and phosphate the principal constituents of bone.
  - HA is the primary mineral found in bone matrix.
- » HA and  $\beta$ -TCP are the two most widely studied ceramics used for bone grafting applications, supported by more than 20 years of clinical experience.
- » The combination of HA and  $\beta$ -TCP provides an engineered combination of the desired characteristics\*:
  - Long-term stability.
  - Resorption.



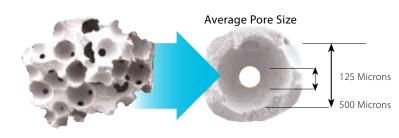
\*Data on file.

# MASTERGRAFT<sup>®</sup> Granules

# **Physical Properties of Resorbable Ceramic Granules**

#### Features

- » 80% porosity.
- » 500 micron average pore size.
- » 125 micron average interconnected diameter.



Immediately

Postoperative

# 25× Magnification

#### The Resorbable Advantage

# **Potential Benefits**

- » Aids osteointegration.\*
  - Supports the bone healing process by acting as a scaffold for new bone formation.
  - Allows creeping substitution to gradually replace the MASTERGRAFT® Granules with new host bone.
- » Supports bone growth throughout the entire defect site.\*
  - Forms strong bonds between MASTERGRAFT<sup>®</sup> Granules and natural bone surrounding the defect.
  - Residual granules are disbursed throughout the defect site and are in direct contact with woven bone and osteoid.
- » Designed to facilitate the regeneration of bone prior to complete resorption.\*
  - Allows for bony ingrowth.
  - Biphasic composition avoids complete resorption prior to bone regeneration.

# Product Ordering Information

# MASTERGRAFT<sup>®</sup> Granules



\*Data on file.



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6 Months Postoperative

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