



Acumed® is a global leader of innovative orthopaedic and medical solutions.

We are dedicated to developing products, service methods, and approaches that improve patient care.



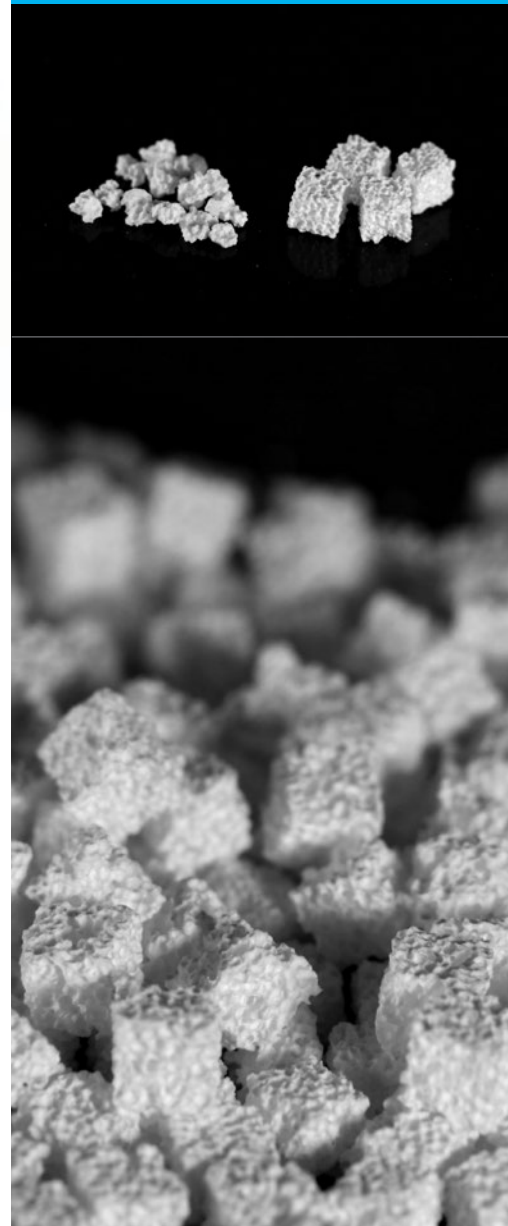
Acumed® OPT Croutons®

Orthobiologics, substances used to help injuries heal more quickly, are commonly used by orthopedic surgeons in a comprehensive treatment plan.¹ OPT Croutons are a synthetic bone graft composed of beta-tricalcium phosphate and are designed to fill bone voids or defects in the skeletal system. OPT stands for Osteoconductive, Porous, Tricalcium phosphate, and "crouton" is a widely accepted description of a bone graft. OPT Croutons offer a high porosity (60–80%), which was designed to provide an optimized structure for bony ingrowth without the loss of stability. Pore sizes range from 200–500 µm, allowing for osteoblast attachment and differentiation. The OPT Croutons product is a biocompatible synthetic bone graft that remodels into bone within 12–24 months. The synthetic nature of this product is designed to minimize the potential risk of immune response, cross contamination and disease transmission. OPT Croutons offer another form of calcium phosphate bone void fillers that complement Acumed's line of osteoconductive products.

Indications for Use:

OPT Croutons are indicated for filling bone voids or defects in the skeletal system (such as the extremities, spine, and pelvis) that are not intrinsic to the stability of the bony structure. These defects may be surgically created osseous defects or osseous defects created from traumatic injury to the bone. OPT Croutons are a bone graft substitute that resorbs and is replaced with bone during the healing process.

¹ "Helping Fractures Heal (Orthobiologics)," American Academy of Orthopedic Surgeons, January 2010. Web. 11 October 2013. <<http://orthoinfo.aaos.org/topic.cfm?topic=A00525>>.



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Features

Features of OPT Croutons:

- Osteoconductive
- Fully synthetic
- Biocompatible composition
- Resorbable
- Interconnected porosity
- Radio-opaque
- Ready to use off the shelf
- 5-year shelf life

Porosity: OPT Croutons offer 60–80% porosity, which was designed to provide an optimized structure for bony ingrowth without the loss of stability. OPT Croutons pore sizes range from 200–500 μm , which allow for osteoblast attachment and differentiation.

Bone Remodeling: The OPT Croutons product is a biocompatible synthetic bone graft that may remodel into bone within 12–24 months. The synthetic nature of the product is intended to minimize the potential risk of immune response, cross contamination, and disease transmission.

OPT Croutons undergo four successive stages after implanting en route to remodeling into natural cancellous bone:

Bone Remodeling Phases	
First Phase	Invasion of OPT Croutons by slack conjunctive tissue after resorption of the post-surgery hematoma.
Second Phase	Osteoblast differentiation from the fibroblast-like cells of the conjunctive tissue.
Third Phase	Osteoid matrix synthesis on the surface of the ceramic.
Fourth Phase	Modeling of newly formed bone tissue or creeping substitution.

OPT Croutons® Surgical Technique



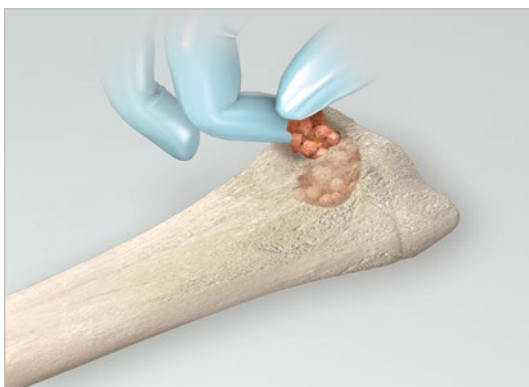
1 OPEN PACKAGING

Remove vial from tray. Discard foil cap and remove rubber stopper.



2 PREPARE OPT CROUTONS (OPTIONAL)

Mix OPT Croutons with blood or autologous bone graft.



3 OPT CROUTONS APPLICATION

Place OPT Croutons directly into the void.

4 APPLICATION VERIFICATION

Ensure the OPT Croutons (mixture) are completely impacted. Do not under-fill.



5 INCISION CLOSURE

Close incision site with surgeon's preferred technique.

Ordering Information

OPT Croutons®

OPT Croutons 5 cc Sterile	65-0205-S
OPT Croutons 10 cc Sterile	65-0210-S

For ordering information, please contact your local Acumed sales representative, call 888.627.9957, or visit acumed.net.



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