

Syn- thetic Bone Graft

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Osteocon-
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Resorb-
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Syn-
thetic

actibone
powder
granule
putty

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Actibone Bone Grafts are synthetic, osteoconductive, porous, interconnected macroporosity and microporosity structured, resorbable and biologically compatible bone graft substitute materials that is characterized by controlled resorption properties and outstanding handling characteristics.

Chemical Composition

Actibone Bone Grafts are synthetic, osteoconductive, resorbable and biocompatible bone substitutes consisting of β -tricalcium phosphate (β -TCP, $[\text{Ca}_3(\text{PO}_4)_2]$) complying with the standards ASTM F 1089 and ISO 13175-3. The solubility and Ca / P molar ratio of β -TCP are close to those of bone mineral. As a result, β -TCP is remodeled into bone by cellular processes. Actibone Bone Grafts are initially radio-opaque. As the bone remodeling process progresses the radio-opacity will resemble the one of autologous bone.

Osteoconductive

Actibone provides a scaffold for new bone growth.

Resorbable

Resorbs in 6-18 months which is similar to the regeneration of new bone tissue.

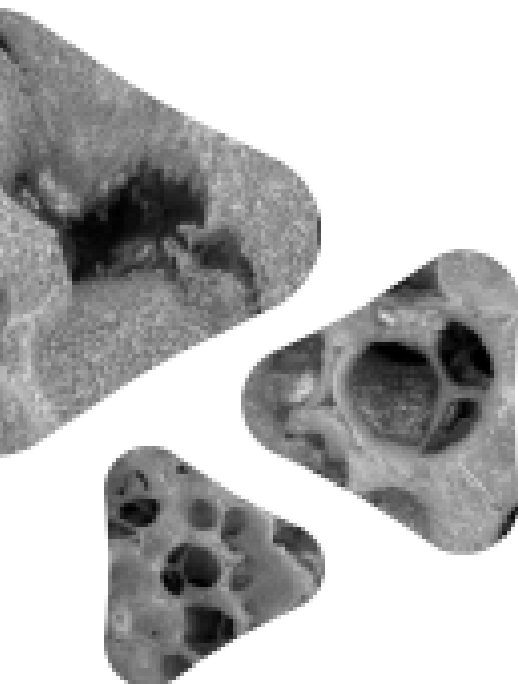
Versatile

Actibone Bone Grafts are available in various sizes and shapes for a wide variety of applications.

Porous Structure

Human cancellous bone is 60-80% porous and comprised of interconnected macropores and micropores. Actibone is 70% porous. Its interconnected micropores enhance fluid wicking through capillary action while macropores allow deep invasion of bone cells into the matrix.

Actibone Granule has a total porosity of 70%, both with interconnecting macropores of 100-500 μm in diameter, allowing vascularisation and bone tissue ingrowth. The microporosity (1-10 μm) enlarges the surface area of the pores and increases the interface between bone and bone substitute.





Application Orthopedic

Extremities

Actibone Granule for the filling of voids in trauma and joint surgery.

Spine

Spinal fusion procedures. Actibone Granule and Actibone Putty act as a bone graft scaffold within a rigid hollow spinal fusion cage.

Hip & Knee

Actibone Granule for the filling of voids during hip and knee, primary and revision surgery.

Femur, Tibia & Humerus

Actibone Granule for the filling of voids from fracture, trauma or tumour resection.

Dental Periodontal & Maxillofacial

Actibone Powder specially designed for small volume applications such as root socket filling, ridge augmentation, sinus lift procedures.



Ordering Information

Product Code	Description	Size/volume
AG025105	Actibone Powder, 0.25-1 mm	0.5 ml
AG0251	Actibone Powder, 0.25-1 mm	1 ml
AG0252	Actibone Powder, 0.25-1 mm	2 ml
AG0511	Actibone Powder, 0.5-1 mm	1 ml
AG0512	Actibone Powder, 0.5-1 mm	2 ml
AG121	Actibone Powder, 1-2 mm	1 ml
AG122	Actibone Powder, 1-2 mm	2 ml
AG125	Actibone Powder, 1-2 mm	5 ml
AG1210	Actibone Powder, 1-2 mm	10 ml
AG1215	Actibone Powder, 1-2 mm	15 ml
AG245	Actibone Granule, 2-4 mm	5 ml
AG2410	Actibone Granule, 2-4 mm	10 ml
AG2415	Actibone Granule, 2-4 mm	15 ml
AG2420	Actibone Granule, 2-4 mm	20 ml
AG2430	Actibone Granule, 2-4 mm	30 ml
AG355	Actibone Granule, 3-5 mm	5 ml
AG3510	Actibone Granule, 3-5 mm	10 ml
AG3515	Actibone Granule, 3-5 mm	15 ml
AG3520	Actibone Granule, 3-5 mm	20 ml
AG3530	Actibone Granule, 3-5 mm	30 ml
AG475	Actibone Granule, 4-7 mm	5 ml
AG4710	Actibone Granule, 4-7 mm	10 ml
AG4715	Actibone Granule, 4-7 mm	15 ml
AG4720	Actibone Granule, 4-7 mm	20 ml
AG4730	Actibone Granule, 4-7 mm	30 ml
AP1	Actibone Putty	1 ml
AP5	Actibone Putty	5 ml
AP10	Actibone Putty	10 ml
AP102	Actibone Putty ISS	2 ml
AP1010	Actibone Putty ISS	10 ml
AP1020	Actibone Putty ISS	20 ml

Synthetic Bone Graft

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