

# Bone void filling

Bioabsorbable synthetic bone substitutes



**B**<sub>IO 1</sub><sup>®</sup>

- ▶ Bioabsorbable and osteoconductive
- ▶ Wide range of products
- ▶ Ready to use

# Pure Tricalcium Phosphate

SBM, a European pioneer in synthetic bone substitutes with more than 20 years of experience, has developed a complete range of fully absorbable synthetic implants for bone void filling.

By totally controlling its technique in biomaterials, SBM provides high purity  $\beta$ -TCP (Tricalcium Phosphate) implants that are ready to use as cancellous or cortico-cancellous bone.

## An implant for each indication

Bio 1<sup>®</sup> is declined in a complete range adapted to specific indications.



## Biosorb, a renowned material

### Ensuring safety

#### Synthetic <sup>1-11</sup>

Biosorb does not contain any organic phase: no risk of viral contamination from human or animal origin (AIDS, hepatitis, bovine and ovine BSE).

#### Biocompatible <sup>1-11</sup>

Composed of high-purity materials, close from the bone mineral components, Biosorb is perfectly tolerated by the organism. To this day, no allergic reaction or toxicity linked to the material has been reported.

#### Mechanical resistance <sup>1-11</sup>

Bio 1<sup>®</sup> implants were designed and adapted in terms of shape and porosity for each indication and tested in our laboratory. The porosity ranges from 30 to 70%, which offers a mechanical strength similar to the one of cortical bone subjected to compression (up to 45 MPa).

### Securing results

#### Bioactivity <sup>12-22</sup>

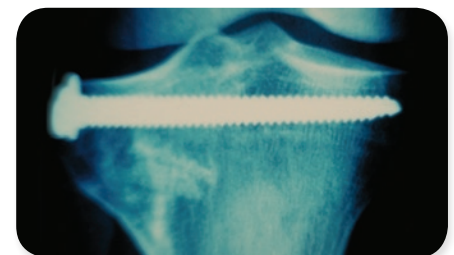
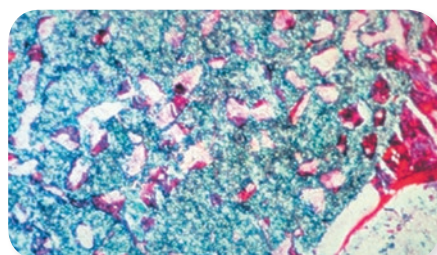
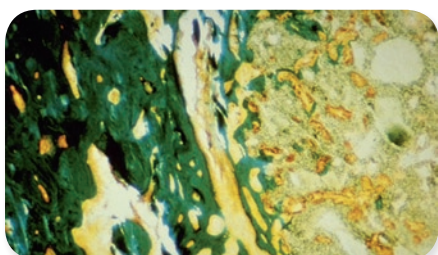
A genuine chemical bond without fibrous interlaying is developed with the bone tissue, without fibrous encapsulation nor inflammation.

#### Osteoconduction <sup>12-22</sup>

Complete control of the macroporosity guides bone cell penetration and improves bone graft integration within the bone tissue.

#### Resorption <sup>12-22</sup>

Bio 1<sup>®</sup> implants are made of bioabsorbable synthetic Tricalcium Phosphate. Implants are thus replaced by healthy new-formed bone once the cellular resorption process is complete.



# Bibliography

## Fundamental studies

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## Clinical studies

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# Ordering information

## BIO 1® synthetic bone substitutes



Codes	Designation	Packaging
P822692240	Granules for filling - ø 1 mm (0.6 cc)	1
P822692243	Granules for filling - ø 1 mm (2 cc)	1
P822692244	Granules for filling - ø 1 mm (5 cc)	1
P822692246	Granules for filling - ø 1 mm (15 cc)	1
P822692444	Granules for filling - ø 1,5 mm (5 cc)	1
P822692446	Granules for filling - ø 1,5 mm (15 cc)	1
P822692644	Granules for filling - ø 3 mm (5 cc)	1
P822692646	Granules for filling - ø 3 mm (15 cc)	1
P822893229	Macro-porous cubes for filling - 4 x 4 x 4 mm (15 cc)	1
P822893233	Macro-porous cubes for filling - 4 x 4 x 4 mm (30 cc)	2
P822893232	Macro-porous cubes for filling - 4 x 4 x 4 mm (45 cc)	3
P822634240	Sticks for filling - 3 x 3 x 10 mm (0.9 cc)	10
P822634440	Sticks for filling - 5 x 5 x 10 mm (1.25 cc)	5
P822634442	Sticks for filling - 5 x 5 x 10 mm (2.5 cc)	10
P822634441	Sticks for filling - 5 x 5 x 10 mm (5 cc)	20
P822634446	Sticks for filling - 5 x 5 x 20 mm (0.5 cc)	1
P822634450	Sticks for filling - 5 x 5 x 20 mm (3 cc)	6
P822634444	Sticks for filling - 5 x 5 x 20 mm (5 cc)	10
P822634445	Sticks for filling - 5 x 5 x 20 mm (10 cc)	20
P822693620	Cubes for filling - 10 x 10 x 10 mm (1 cc)	1
P822693624	Cubes for filling - 10 x 10 x 10 mm (10 cc)	10
P822693622	Cubes for filling - 10 x 10 x 10 mm (2 cc)	2
P822693210	Cubes for filling - 5 x 5 x 5 mm (0.12 cc)	1
P822693220	Cubes for filling - 5 x 5 x 5 mm (0.25 cc)	2
P822693221	Cubes for filling - 5 x 5 x 5 mm (0.62 cc)	5
P822693222	Cubes for filling - 5 x 5 x 5 mm (1.25 cc)	10
P822693420	Cubes for filling - 7 x 7 x 7 mm (0.34 cc)	1
P822693421	Cubes for filling - 7 x 7 x 7 mm (0.69 cc)	2
P822693422	Cubes for filling - 7 x 7 x 7 mm (1.71 cc)	5
P822694444	Block for filling - 10 x 10 x 25 mm (2.5 cc)	1
P822374400	Block for filling - 30 x 20 x 10 mm (6 cc)	1
P822441442	Cylinder for filling - ø 6 mm / L 25 mm	2
P822441444	Cylinder for filling - ø 6 mm / L 25 mm	4
P822661222	Cylinder for filling - ø 8 mm / L 10 mm	3
P822375602	Implant for ankle arthrodesis - 30 x 25 x 7 x 3 mm (3.75 cc)	1
P822375000	Implant for metatarsian osteotomy - 15 x 10 x 4 x 2 mm (0.45 cc)	1
P822694220	Implant for patellar filling 10 x 10 x 6 mm	1
P822311244	Implant for trephine hole filling - ø 10 mm	2
P822311245	Implant for trephine hole filling - ø 10 mm	3
P822311444	Implant for trephine hole filling - ø 12 mm	2
P822311445	Implant for trephine hole filling - ø 12 mm	3
P822311644	Implant for trephine hole filling - ø 14 mm	2
P822311645	Implant for trephine hole filling - ø 14 mm	3



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