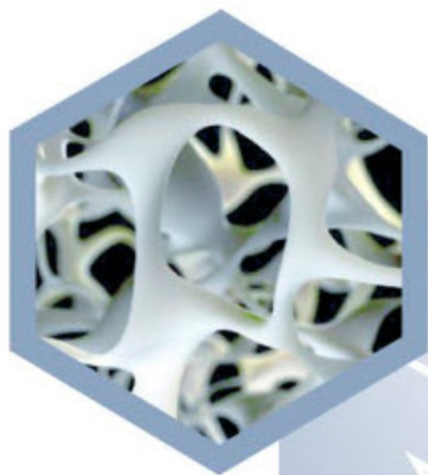


orthopaedics

CALCEMEX



**The innovative
reinforced bone substitute**

**Hybrid formula
 β -TCP + PMMA**

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CALCEMEX THE INNOVATIVE REINFORCED BONE SUBSTITUTE

Osteoconductive, porous and mechanically superior

Thanks to the hybrid formula β -TCP + PMMA, it combines the advantages of both components.

Advantages of the β -TCP component: Osteoconductivity¹

Bone tissue gradually grows inside the biomaterial.⁶

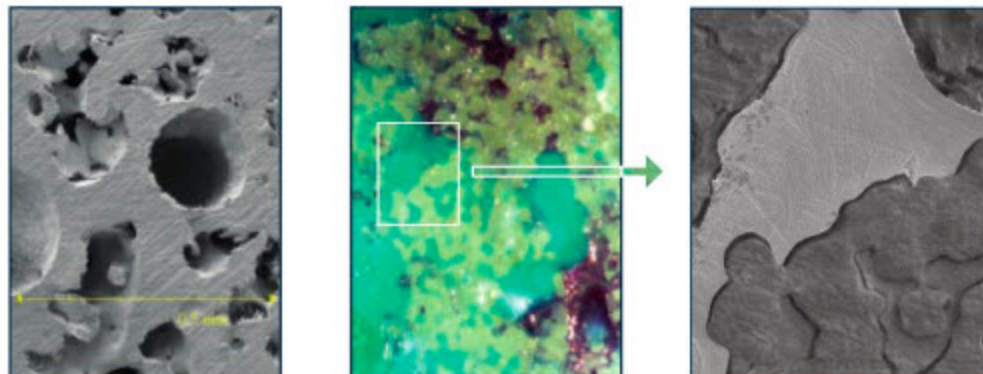
The β -TCP portion is gradually reabsorbed, leaving space for bone ingrowth.



■ = osteoid tissue ■ = bone tissue □ = bone cement

Osteoconductivity favoured by porosity

	Open porosity ²	Microporosity ³	Macroporosity ⁴
Obtained by	Special β -TCP + PMMA formula	Part of the fine powder that constitutes the material	Cavities up to 500 μ m, obtained by the programmed dissolution of a pre-set number of β -TCP granules
Features	Capillarity	Resorbability	Osteoconductivity
Effect	The special formula allows fluids to penetrate inside the material, to favour bone ingrowth.	The bone is able to rebuild in a more diffuse manner.	Macropores house the new bone tissue, allowing differentiation into lamellae.



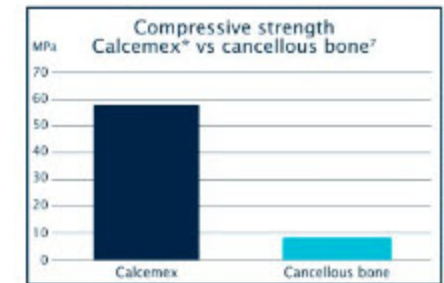
Microporosity and macroporosity

■ = Newly-formed bone (histological image)⁵

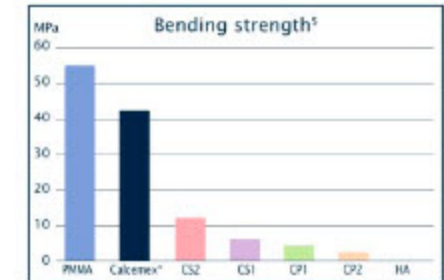
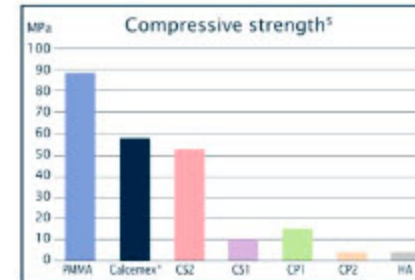
■ = Bone lamellae (microscopic analysis)⁵

Advantages of the PMMA component: Resistance

- ▶ It achieves maximum mechanical resistance immediately after polymerization.
- ▶ Unaltered resistance over time.
- ▶ Long-lasting support for bone tissue.
- ▶ Unchanged volume over time.



Superior performances



Calcemex boasts superior mechanical resistance to bone substitutes containing calcium sulphate (CS), calcium phosphate (CP) and hydroxyapatite (HA).

⁵ In-house tests performed according to ISO standard 5833.

Easy to use

Calcemex can either be applied manually or injected into deeper structures. Working time up to 5min. and 45 sec. ^{**} It is radiopaque and therefore visible on X-rays.

Indications

Calcemex is a bone void filler intended for bony voids or defects that are not intrinsic to the stability of the bony structure.

Possible uses

Fractures of the distal radius
Fractures of the proximal/distal tibia
Calcaneal fractures
Filling of cavities left by revision procedures

Fractures of the femoral or distal femur
Fractures of the proximal humerus
Acetabular fractures
Filling of cystic lesions

^{**} applied by syringe