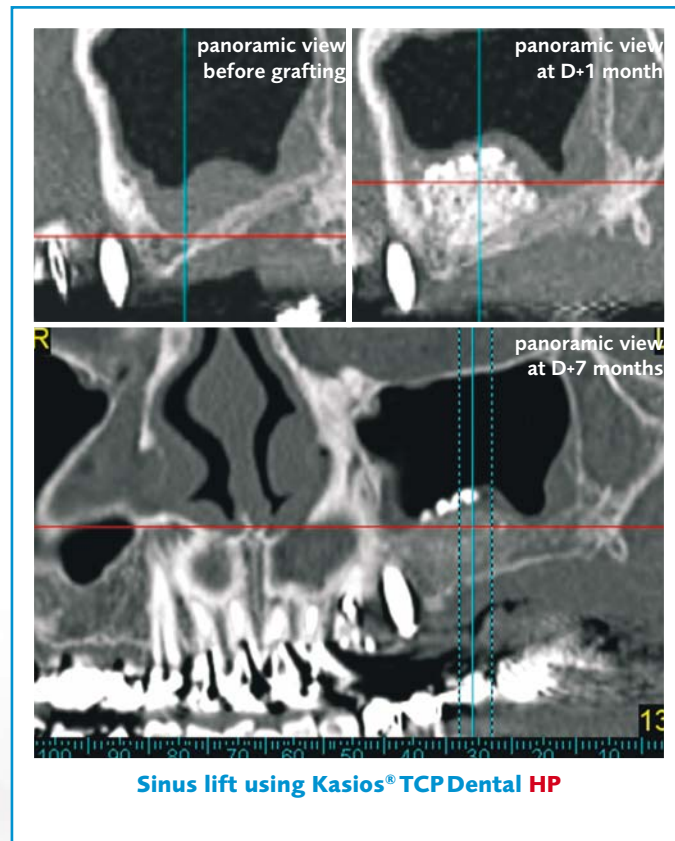


kasios®

kasios® TCP

Dental HP

High Porosity Synthetic Bone Substitute



TECHNICAL DATASHEET

www.kasios.com

Kasios®TCP Dental HP is a high porosity (about 85%) synthetic bone substitute with excellent interconnection.

When it is implanted in a bone site Kasios®TCP Dental HP's porosity and chemical composition (beta-TCP) allow it to be partly replaced by newly formed bone in 6 to 7 months.

Indications

Bone defect filling or reconstruction in oral surgery for the placement of dental implants in adults:

- . Sinus lift.
- . Bone defect filling.
- . Alveolar reconstruction.

Biomaterial

Kasios®TCP Dental HP is composed of beta-TCP. Beta-TCP belongs to the same chemical family as the mineral substance of bone, so that osseointegration is complete when it is placed in a bone site.

Histology

Bone cores were sampled at D+3 months from the sinuses previously filled with Kasios®TCP Dental HP. In all cases, the same degree of bone remodeling was seen (see imagery below). Please note on the second picture the perfect apposition of bone to biomaterial, evidence of its osseointegration.

Granulometric data



Grain size: 500-1000 µm
(0.5 to 1mm)

Recommended for medium-sized bone defect filling and alveolar reconstruction.



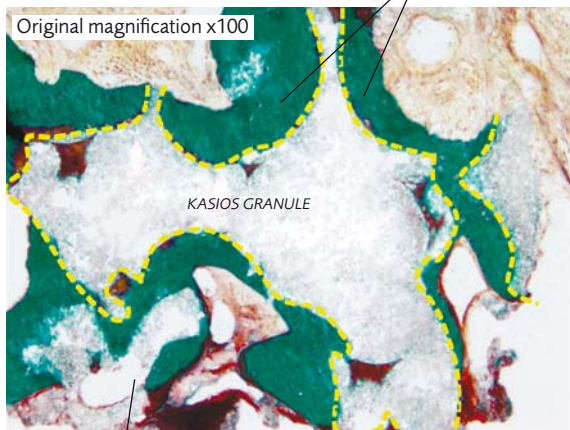
Grain size: 1000-2000 µm
(1 to 2 mm)

Recommended for sinus lift.

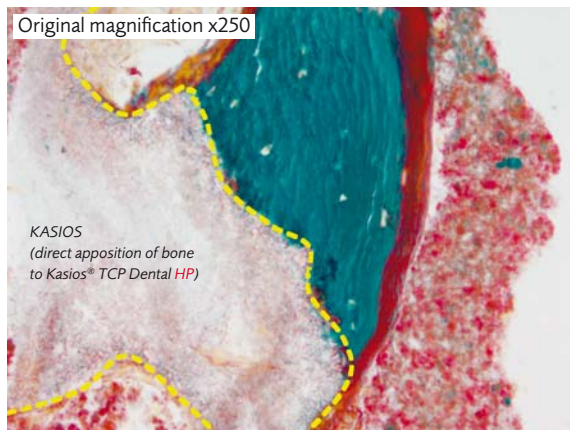
Color: Goldner's trichome

— — : borderline of implanted granules

Macropores covered by calcified bone tissue (green).
Shown in red, osteoid tissue. (=non calcified bone recently produced by osteoblasts).



Totally osseointegrated part of granule.



INSERM U922-Angers (Pr D. Chappard)

Kasios TCP

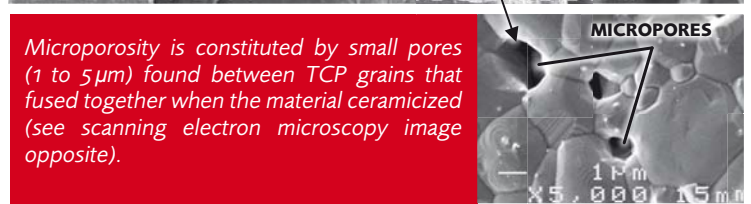
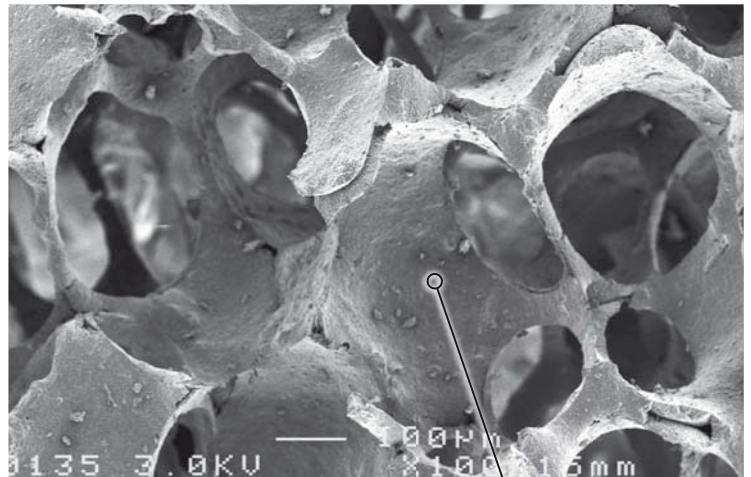
Dental HP

Porosity

Global Kasios®TCP Dental HP porosity is close to 85%. Both macroporosity and microporosity are present.

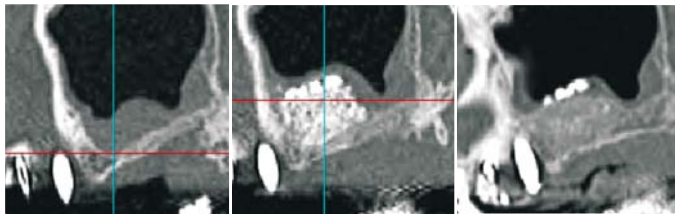
The macroporous component is made up of large-sized pores (0.2 to 0.5mm), all interconnected (see photo opposite). This interconnected macroporosity allows bone to penetrate into the biomaterial (osseointegration by osseoconduction).

The next step is the start of the Kasios®TCP Dental HP bone remodeling process, during which bone cells will be fragmenting and digesting the biomaterial while they produce new bone replacement tissue.



INSERM U922-Angers (Pr D. Chappard)

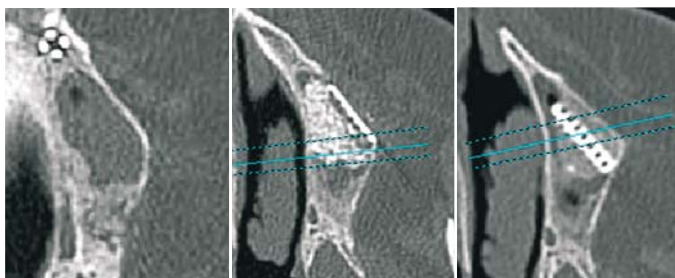
CLINICAL CASE: Filling of bone tissue loss in a sinus lift process with Kasios® TCP Dental HP grafting and dental implant reconstruction, at 7 months.



panoramic view before grafting

panoramic view at D+1 month

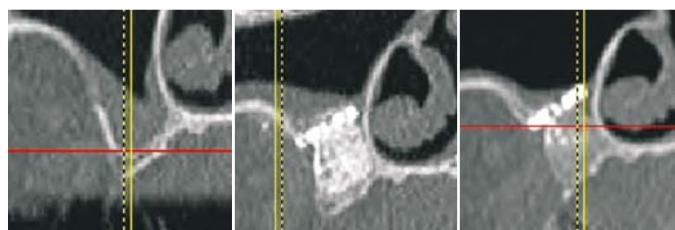
panoramic view at D+7 months



horizontal view before grafting

horizontal view at D+1 month

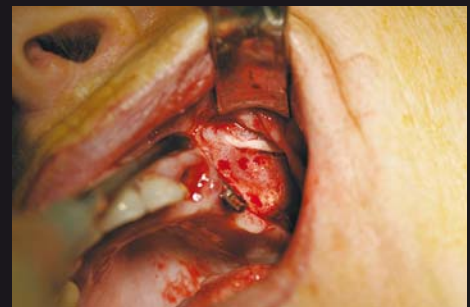
horizontal view at D+7 months



profile before grafting

profile at D+1 month

profile at D+7 months



placing implants



x-ray after placing implants

(Courtesy of Bernard Guillaume, M.D. and Norbert Bellaïche, M.D.)



Packaging

Kasios® TCP Dental HP is packaged in boxes containing 5 double cups (individually sterile).

Designation	Reference	Packaging
KASIOS TCP Dental HP 500-1000 µm	K4070550HP	Box of 5 cups x 0.5 cc - Sterile
KASIOS TCP Dental HP 1000-2000 µm	K4071050HP	Box of 5 cups x 0.5 cc - Sterile
KASIOS TCP Dental HP 500-1000 µm	K4070600HP	Box of 5 cups x 1 cc - Sterile
KASIOS TCP Dental HP 1000-2000 µm	K4071100HP	Box of 5 cups x 1 cc - Sterile

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