Technical Data Sheet

PRODUCT INFORMATION

nanoXIM•TCP200 is a synthetic calcium deficient hydroxyapatite powder, manufactured by FLUIDINOVA S.A.

General specifications

Phase purity, $Ca_3(PO_4)_2$, % [(1)]	≥ 90
Specific surface area BET, m^2/g	≥ 80
Heavy metals, as Pb, ppm	≤ 20
Particle size, d_{50}, µm	4.0 ± 2.0

[(1)] Minimum phase purity ensured after sintered for 15h at 1000ºC, in accordance with ISO13779.

Product properties

Specific gravity, g/cm^3	0.30 ± 0.05
Physical appearance	White powder

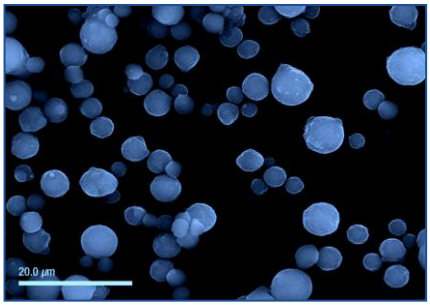

Figure 1. SEM image - General overview.

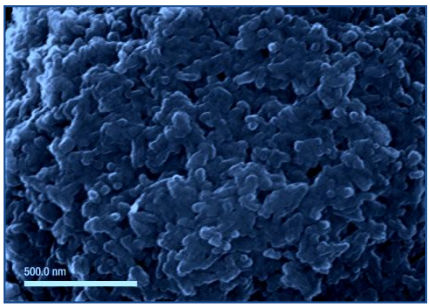

Figure 2. SEM image – micrometric agglomerate of nanoparticles.

GENERAL INFORMATION

nanoXIM•TCP200 is a calcium deficient hydroxyapatite white powder, also known as amorphous β-Tricalcium Phosphate (β-TCP), consisting of micrometric agglomerates composed by nanoparticles with dimensions < 50nm.

The most common applications of β-TCP powder is to develop innovative applications such as bone porous granules, biomaterials, tissue engineering, chromatography and separation, biotechnology, pharmaceuticals and drugs.

nanoXIM•TCP200 is supplied as unsintered powder (Figure 3). If the product is sintered at 1000°C, a minimum β-TCP phase purity of 90% is ensured (Figure 4).

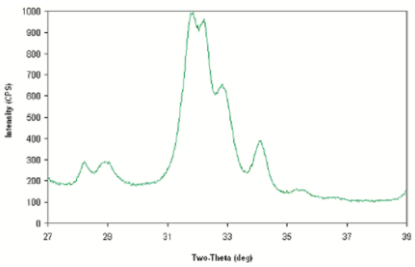

Figure 3. XRD spectrum of nanoXIM•TCP200 powder as produced and supplied.

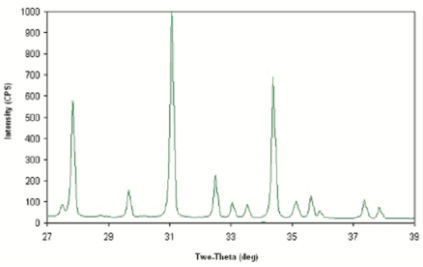

Figure 4. XRD spectrum of nanoXIM•TCP200 powder after sintering treatment at 1000 ºC. These conditions ensure a minimum of 90% β-TCP phase purity.

Package

Available in PE food grade containers at different sizes.

Storage, Safety & Handling

To ensure the quality of the product, keep it in a closed container at room temperature in a clean and dry place.

For more details about product safety and handling information, please refer to the FLUIDINOVA Safety Data Sheet (SDS).

FLUIDINOVA, S.A.
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