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

PRODUCT IDENTIFICATION

Trade name nanoXIM•TCP200

SKU 502200

IUPAC name Tricalcium diphosphate
Synonyms β-Tricalcium phosphate

CAS number 7758-87-4 EC number 231-840-8 Chemical formula $Ca_3 (PO_4)_2$



	Unit		Specifications
Phase purity, Ca ₃ (PO ₄) ₂ *	%	≥	95
Total heavy metals (as Pb)	ppm	≤	20
Specific surface area	m²/g	≥	80
Particle size (d ₅₀)	μm		4,0 ± 2,0

^{*} A minimum of 95% phase purity is assured in accordance with ASTM F1088-04^{ε1} after calcination for 15h at 1000°C following ISO13779.



GENERAL PROPERTIES Product

Bulk density 0.35 ± 0.10 g/cm³ Particle type Microparticles

Physical appearance Spray dryer white and odourless powder

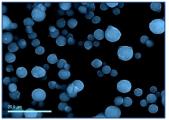


Figure 1. SEM image - General overview

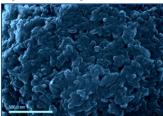


Figure 2. SEM image – micrometric aggregate of nanoparticles.

GENERAL INFORMATION

nanoXIM•TCP200 is a calcium deficient hydroxyapatite white powder, also known as amorphous β -Tricalcium Phosphate (β -TCP), consisting of micrometric aggregates of 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 and many others.

nanoXIM•TCP200 is supplied as non-calcined powder (Figure 3). After calcination at 1000°C, a minimum β -TCP phase purity of 95% is ensured (Figure 4).

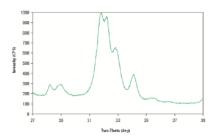


Figure 3. XRD spectrum of nanoXIM•TCP200 powder as produced and supplied.

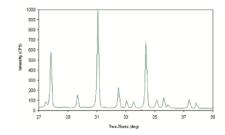


Figure 4. XRD spectrum of nanoXIM•TCP200 powder after calcination at 1000 °C.

Package

Available in PE or PP food grade containers at different sizes.

Storage, Safety and 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 see the product Safety Data Sheet (SDS). Shake before use to ensure homogeneity

