

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	$\text{Ca}_3(\text{PO}_4)_2$

PRODUCT INFORMATION

	Unit	Specifications
Phase purity, $\text{Ca}_3(\text{PO}_4)_2^*$	%	≥ 95
Total heavy metals (as Pb)	ppm	≤ 20
Specific surface area	m^2/g	≥ 80
Particle size (d_{50})	μm	$5,0 \pm 2,0$

* A minimum of 95% phase purity is assured in accordance with ASTM F1088-04¹³ after calcination for 15h at 1000°C following ISO13779.



GENERAL PROPERTIES Product

Bulk density	$0,35 \pm 0,10 \text{ g/cm}^3$
Particle type	Microparticles
Physical appearance	Spray dryer white and odourless powder

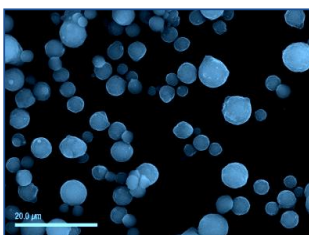


Figure 1. SEM image - General overview.

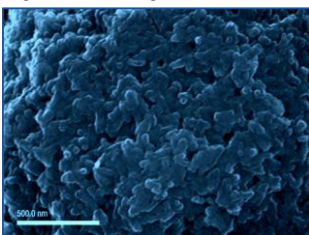


Figure 2. SEM image – micrometric aggregate of nanoparticles.

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 $< 50\text{nm}$.

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).

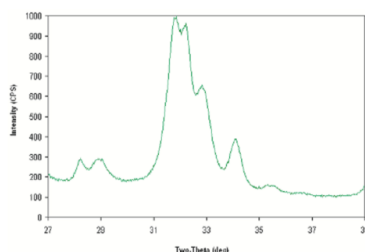


Figure 3. XRD spectrum of nanoXIM•TCP200 powder as produced and supplied.

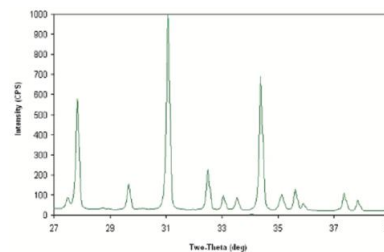


Figure 4. XRD spectrum of nanoXIM•TCP200 powder after calcination at 1000 °C.

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