

nanoXIM•HAp200 is a series of nanostructured synthetic hydroxyapatite powders, manufactured and supplied in 2 different particle sizes by FLUIDINOVA, S.A.

PRODUCT IDENTIFICATION

IUPAC name	Pentacalcium hydroxide triphosphate
CAS number	12167-74-7
EC number	235-330-6
Synonyms	Hydroxyapatite (CAS No.1306-06-5)
Chemical formula	$\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$
REACH ID number	01-2119490075-38-0021

PRODUCT INFORMATION

General specifications	Unit	Specifications
Phase purity of Hydroxyapatite	%	100 (*)
Total heavy metals (as Pb)	ppm	≤ 20
Specific surface area	m ² /g	≥ 80

(*) A minimum of 95% hydroxyapatite phase purity is assured after calcination for 15h at 1000°C following ISO13779.

Product specifications	Product	Unit	Specifications
Particle size (d ₅₀)	nanoXIM•HAp202	µm	5,0 ± 1,0
	nanoXIM•HAp203	µm	10,0 ± 2,0

GENERAL PROPERTIES	Product	Unit	Value
Bulk density	nanoXIM•HAp202	g/cm ³	0,50 ± 0,10
	nanoXIM•HAp203	g/cm ³	0,60 ± 0,10
Physical appearance	nanoXIM•HAp202		White fine powder
	nanoXIM•HAp203		White fine powder

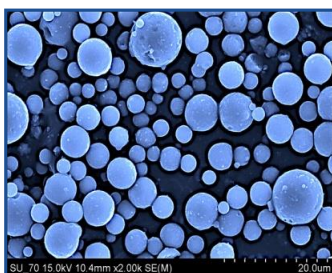


Figure 1. SEM image - General overview.

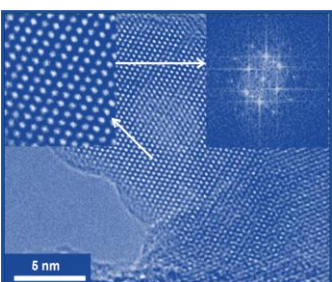


Figure 2. TEM image - Crystal orientation.

GENERAL INFORMATION

nanoXIM•HAp200 are powders consisting of micrometric aggregates of synthetic hydroxyapatite nanoparticles. These products are suitable for manufacturing bone graft substitutes such as porous granules and blocks for bone regeneration. The precise stoichiometry of these powders allow them to be sintered at high temperatures without significant phase changes, making them quite interesting to produce synthetic ceramics with controlled composition. Due to their high surface area and similarity with the bone inorganic phase, nanoXIM•HAp200 powders allow the construction of highly biocompatible and osteostimulative bone substitutes. No adverse reactions have ever been reported by the use of these materials in any medical device.

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.