

nanoXIM•HAp100 is a series of synthetic nano-hydroxyapatite aqueous pastes, manufactured and supplied in 2 different concentrations 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
Particle size	nm	< 50

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

Product specifications	Product	Unit	Specifications
Hydroxyapatite,	nanoXIM•HAp102	wt%	15,0 ± 1,0
$\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$	nanoXIM•HAp103	wt%	30,0 ± 3,0
Water,	nanoXIM•HAp102	wt%	85,0 ± 1,0
H ₂ O	nanoXIM•HAp103	wt%	70,0 ± 3,0

GENERAL PROPERTIES	Product	Unit	Value
Density	nanoXIM•HAp102	g/cm ³	1,1 ± 0,1
	nanoXIM•HAp103	g/cm ³	1,2 ± 0,1
Physical appearance	nanoXIM•HAp102		White thin paste
	nanoXIM•HAp103		White thick paste



Figure 1. TEM image - General overview.

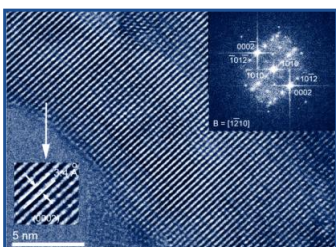


Figure 2. TEM image - Crystal orientation.

GENERAL INFORMATION

nanoXIM•HAp100 are synthetic nano-hydroxyapatite water based pastes suitable for the manufacture of bone grafts such as injectable bone substitutes.

Due to their high surface area and similarity with the bone mineral, nanoXIM•HAp100 pastes are highly osteostimulative, promoting the adhesion of bone cells and fast formation of new bone. The medical devices manufactured with nanoXIM•HAp100 pastes allow fast and safe bone regeneration and are highly biocompatible. No adverse reactions have ever been reported by the use of these materials.

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. Do not freeze.

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

Container should be stirred before every use to homogenise the product.

