

**nanoXIM•HAp300** is a series of synthetic nano-hydroxyapatite aqueous suspensions and pastes, manufactured and supplied in 3 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	$\text{m}^2/\text{g}$	≥ 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, $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$	nanoXIM•HAp301	wt%	5,0 ± 1,0
	nanoXIM•HAp302	wt%	15,0 ± 1,0
	nanoXIM•HAp303	wt%	30,0 ± 3,0
Water, $\text{H}_2\text{O}$	nanoXIM•HAp301	wt%	95,0 ± 1,0
	nanoXIM•HAp302	wt%	85,0 ± 1,0
	nanoXIM•HAp303	wt%	70,0 ± 3,0

GENERAL PROPERTIES	Product	Unit	Value
Density	nanoXIM•HAp301	$\text{g}/\text{cm}^3$	1,0 ± 0,1
	nanoXIM•HAp302	$\text{g}/\text{cm}^3$	1,1 ± 0,1
	nanoXIM•HAp303	$\text{g}/\text{cm}^3$	1,2 ± 0,1
Physical appearance	nanoXIM•HAp301		White suspension
	nanoXIM•HAp302		White thin paste
	nanoXIM•HAp303		White thick paste

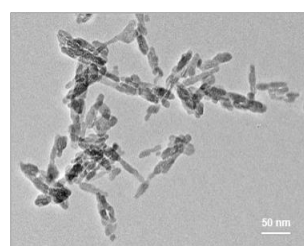


Figure 1. TEM image - General overview.

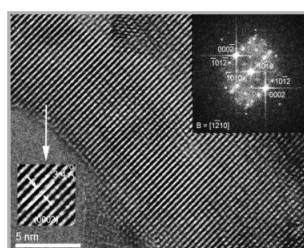


Figure 2. TEM image - Crystal orientation.

## GENERAL INFORMATION

nanoXIM•HAp300 are synthetic nano-hydroxyapatite water based suspensions and pastes with typical particle size below 50 nm. These products are suitable for biotechnology, composites, chromatography and several other application areas.

### 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.