

Technical Data Sheet  
Beta Tricalcium Phosphate ( $\beta$ -TCP, nanopowder)

**Properties**

<b>Form</b> : Nanopowder	Biocompatible
<b>Particle Size</b> : <100 nm	Biodegradable
<b>CAS Number</b> : 7758-87-4	Osteoconductive - osteoinductive
<b>MDL Number</b> : MFCD00015984	Chemical affinity towards biological molecules
<b>Empirical Formula</b> : $\text{Ca}_3\text{O}_8\text{P}_2$	

**Product Description**

Beta Tricalcium phosphate ( $\beta$ -TCP) is one the most used and potent synthetic bone graft substitutes. When compared to HA, it has been posited that beta tricalcium phosphate ( $\beta$ -TCP) exhibits better biodegradability, hence it can be absorbed better and replaced by newly generated hard tissues. This property makes beta tricalcium phosphate ( $\beta$ -TCP) a promising biomaterial among all other non-resorbable materials. Nano-sized  $\beta$ -TCP, in particular, has attracted great attention in many biomedical applications.

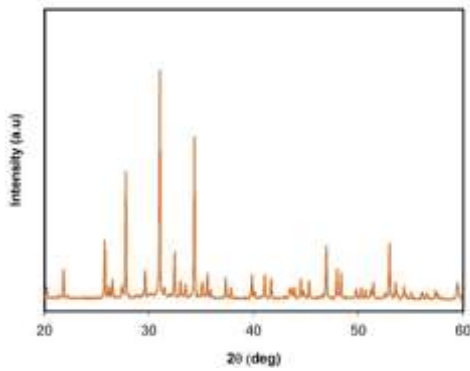
**Application areas**: Nanomedicine, tissue engineering, bioimaging, and drug delivery systems

**Shipping**: Ready to ship in 4 business days.

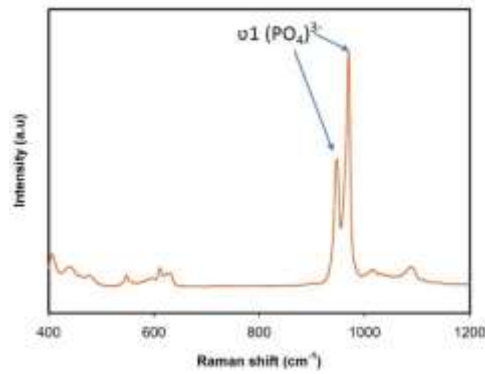
**Storage conditions**: Room temperature for the powder form, +4°C for the suspension form

**Packaging** : 10 g, 100g

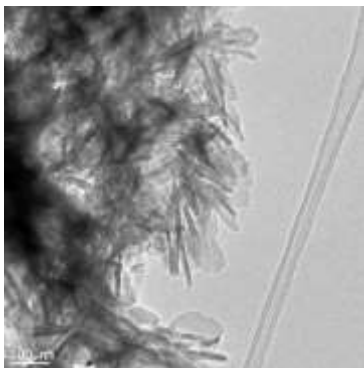
**Quality Control**



XRD spectrum of  $\beta$ -TCP nanoparticles



Raman spectrum of  $\beta$ -TCP nanoparticles



Bright-field TEM micrograph of  $\beta$ -TCP nanoparticles