

Technical Data Sheet

Product description:

Ceramat β -TCP granules are the sintered biphasic β -tricalcium phosphate granules manufactured by CERMAT.

General information

The biphasic β -tricalcium phosphate granules are synthetic granules. The composition consists of β -TCP along with hydroxyapatite (HA) as an additional phase. They are widely used as a raw material/precursor for the formulation of bone graft as well as bone void fillers. This product is manufactured by the sintering process of the millimeter sized granules. These granules cannot be treated as a finished product.

IUPAC name: Tricalcium diphosphate

Product name: β -tricalcium phosphate (β -TCP) granules

Molecular formula: β - $\text{Ca}_3(\text{PO}_4)_2$

Molecular weight: 310.18 g/mol

CAS Number: 7758-87-4

Product Specifications

S.No.	Tests	Method	Specifications
1.	Phase Purity	X-ray diffraction	• β -TCP ≥ 85 % Conforms with ICDD file no. 09-0169
2.	Additional Phase	X-ray diffraction	• HA > 5 % • (α -TCP + TTCP + CaO) ≤ 5 % • CaO ≤ 1 %
3.	Appearance	Visual	White granules with no other-colored particles (impurities)
4.	Bulk Density	Manual	0.5-1 g/cc**
5.	Granule Size	Sieving method	1-3 mm, 3-5 mm, 5-8 mm*
6.	Heavy Metals	ICP-MS and ICP-OES	Pb ≤ 30 ppm; Hg ≤ 5 ppm; Cd ≤ 5 ppm; As ≤ 3 ppm

*Customized as per the requirement.

**Specified value will be given in the certificate of analysis

Storage and Safety

Keep the container closed and store in a cool and dry place. Refer to MSDS for any additional information.

Shake before use to ensure homogeneity