

# HYDROXYAPATITE POWDER

**Purity**  
**>99.99%**

**CAS**  
**1305-06-5**

**NS6130-05-566**

Hydroxyapatite, also called hydroxylapatite (HA), is a naturally occurring mineral form of calcium apatite with the formula  $\text{Ca}_5(\text{PO}_4)_3(\text{OH})$ , but it is usually written  $\text{Ca}_{10}(\text{PO}_4)_6(\text{OH})_2$  to denote that the crystal unit cell comprises two entities. Hydroxyapatite has been used for a variety of biomedical applications, including matrices for drug release control and bone tissue engineering materials. HA is commonly used for bone repair, bone augmentation, as well as coating of implants.

## Technical Specification

Molecular Weight	Mol Formula	Melting Point	APS
502.31g/mol	H <sub>Ca</sub> 5O <sub>13</sub> P <sub>3</sub>	1064.18 °C	10-15µm

## Applications

- Telecommunications, Optical communications equipment
- Bone tissue engineering
- Bone void fillers for orthopaedic, traumatology, spine, maxillofacial and dental surgery.
- Orthopedic and dental implant coating
- Restoration of periodontal defects
- Edentulous ridge augmentation
- Endodontic treatment like pulp capping
- Repair of mechanical furcation perforations and apical barrier formation
- Fillers for reinforcing restorative glass ionomer cement (GIC) and restorative composite resin
- Desensitizing agent in post teeth bleaching
- Remineralizing agent in toothpastes



ISO 9001:2015  
CERTIFIED COMPANY



Follow us:



| www.nanoshel.com | sales@nanoshel.com

**INTELLIGENT MATERIALS PVT LTD**

Derabassi  
Punjab (140507)  
INDIA

+91 9779 550077, 9779238252

**NANOSHEL UK LIMITED**

Chapel House,  
Chapel St Cheshire,  
CW12 4AB United Kingdom

+44 (0) 74 105 488, +44 203 137 5187

**NANOSHEL LLC**

3422 Old Capitol Suit  
1305 Wilmington DE - 19808  
United States

+1 646 470 4911