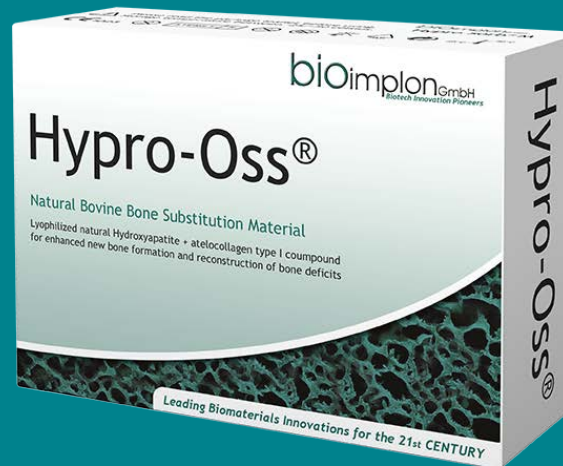

Hypro-Oss[®]

Innovative Bovine Bone Substitution Material

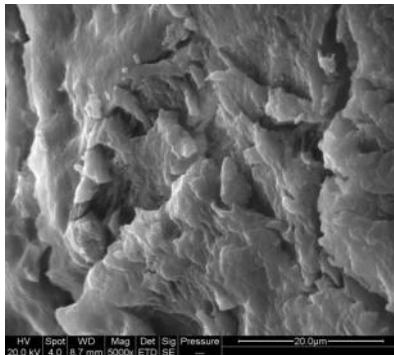


General information

Hypro-Oss® is a natural bovine bone substitution material with incorporated Atelo-Collagen Type I. It is used for the permanent filling or reconstruction of antiseptic bone defects.



Hypro-Oss® granules 0.5 – 1.0 mm



Electron microscope image of Hypro-Oss®

Indications

Indications in orthopedic surgery and traumatology:

Filling of

- Bone defects in juxta-articular fractures
- Defects of the acetabulum on change of prosthesis
- Bone defects after excision of benign tumors
- Bone cysts
- Tissue defects in cartilage and bone transplants
- Bone defects at donor sites after harvest of autogenous bone.

Implantology, periodontology and oral surgery:

- Sinus lift
- Vertical and horizontal augmentation
- Intraosseous defects
- Peri-implant defects
- Extraction sockets
- Furcation defects
- Filling of cysts
- Periodontal defects



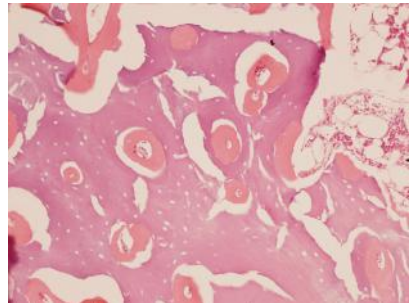
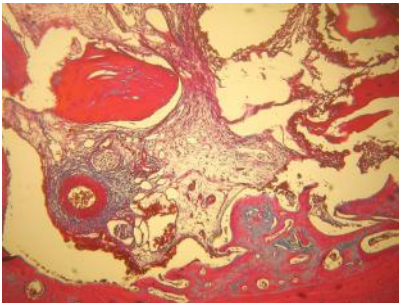
Application of Hypro-Oss and Hypro-Sorb F.
Images courtesy of Dr. Amir Gazmawe DMD Prosthodontist

Properties of Hypro-Oss®

Hypro-Oss is produced with our patented atelopeptidation and lyophilization technologies. These result in the following important characteristics:

1. **Native bovine bonegraft composite for enhanced new bone formation**
2. **Telopeptide-free collagen components (Atelo-Collagen Type I); non-immunogenic peptide**
3. **Acceleration of physiological tissue healing process**
4. **Protects grafting site from infection (bacteriostatic effect of Atelo-Collagen Type I)**
5. **Hydrophilic property: optimal cell adhesion and blood absorption**
6. **Capability to carry medication to the surgical site**
7. **Highest biocompatibility: absence of any foreign body response**
8. **Natural structures of collagen and hydroxyapatite due to lyophilization processing**
9. **Ostepromotive Atelo-Collagen Type I components and osteoconductive hydroxyapatite components**
10. **Native crystalline structure guarantees long-term dimensional stability**
11. **Powerful haemostatic effect of the Atelo-Collagen Type I that averts haematoma formation after surgical procedures**

These characteristics allow enhanced and consistent new bone formation, and persistent integration between mature newly formed bone and existing bone material.



Histologie nach vier Wochen (links) und 14 Wochen (rechts)

Composition:

Hypro-Oss is a natural bovine bone graft. Each granule consists of approximately 70% hydroxyapatite and 30% Atelo-Collagen Type I.



Hypro-Oss®
grain size
0.5 - 1.0 mm



Hypro-Oss®
grain size
1.0 - 2.0 mm



Hypro-Oss®
grain size
3.0 - 6.0 mm



Hypro-Oss®
grain size
4.0 - 8.0 mm

Important information

Shelf life:

The product is safe for four years after the date of production.

Storage conditions:

Hypro-Oss must be stored at room temperature in a dry place. It is not damaged by temperatures between 0°C and +50°C. It must be kept away from sources of heat and out of direct sunlight.

Safety information

In the course of production, the raw materials are treated with bactericidal solutions of sodium chloride, peracetic acid and saturated solution of calcium hydroxide in order to control the risk of contamination with bacteria, viruses and yeasts. After final packaging, Hypro-Oss undergoes Gamma Irradiation as final sterilization step. Gamma radiation sterilization is a process that effectively kills or eliminates almost all microorganisms like fungi, bacteria, viruses and spore forms. Materials treated this way are used in the production of Hypro-Oss. It consist of prion-free tissues, which are fully safe as TSE is concerned. Hypro-Oss is absolutely BSE free.

Hypro-Oss® Product Portfolio

| Product name / Description | Cat.no. | Granule size | Volume |
|---|---------|--------------|--------|
| Hypro-Oss® Natural bovine bone substitute with integrated Atelo-Collagen Type I. Indicated for - Orthopaedic surgery - Traumatology - Maxillofacial surgery - Implantology | 070 | 0.5 - 1.0 mm | 0.5 ml |
| | 071 | | 1.0 ml |
| | 072 | | 3.0 ml |
| | 073 | | 5.0 ml |
| | 090 | | 25 ml |
| | 074 | 1.0 - 2.0 mm | 0.5 ml |
| | 075 | | 1.0 ml |
| | 076 | | 3.0 ml |
| | 077 | | 5.0 ml |
| | 091 | | 25 ml |
| | 078 | 3.0 - 6.0 mm | 1 ml |
| | 079 | | 5 ml |
| | 080 | | 10 ml |
| | 081 | | 20 ml |
| | 082 | | 25 ml |
| | 083 | | 30 ml |
| | 084 | 4.0 - 8.0 mm | 1 ml |
| | 085 | | 5 ml |
| | 086 | | 10 ml |
| 087 | 20 ml | | |
| 088 | 25 ml | | |
| 089 | 30 ml | | |

Hypro-Oss® is a sterile medical device class III. CE and ISO certificated.