



- Composed of native bones components SiO2, Ca, Na2O, H, and P
- Its Unique structure provides a Biological active Bone Bonding
- It provides an environment where it inhibit Bacterial Growth
- It bears No risk of Disease transmission
- Immediate mechanical stability
- **Stimulation of Osteogenesis**
- Osteogenic cell attachment
- **Bioactive Bone Bonding**
- **Natural HA Formation**
- Osteoconductive



#### **BIOACTIVITY**

Bioactive release of ion is spread around the neighboring tissue and react with bodily fluids. This chemical reaction forms a layer on tissue acting as a calcium phosphate precipitation. This Surfa ce creation attracts osteoblast to facilitate the newbone formation.

# **CHEMICAL BONDING AND ANGIOGENESIS**

A number of chemical and physical reaction on the surface of granulesstimulate a chemical bonding process making the granules very cohesive to thehost tissue. This process promote angioness (neovascularization ) the tissue.

# 3D SCAFFOLD STRUCTURE

When the granules are bonded together, the irregular granules (between 1-3mm) help to create a natural scaffold structure. This irregularly shaped structure helps to create 3D scaffold with a porosity of 75-80% macroporosity. This enables the new bone to grow around between and also through granules

#### RESORPTION

Degrades at the same rate as the bone is repaired;

# **INHIBITION OF BACTERIA**

Release of Na, Ca, Si and P from granules leads to an increase in pH (alkaline environment) and an increase in osmotic pressure, which makes the environment unfavorable for bacteria to grow

## **TISSUE HEALING**

A rise in alkaline around granules help tissue heal faster than at lower PH in inflamatory process.

### **INDICATIONS**

For filling, augmenting and reconstruction of bone voids and defects in the following surgeries Orthopedic Surgery, Paediatric orthopedic surgery, Chronic osteomyelitis surgery Trauma Surgery, Spine Surgery, Cranio-Oral-Maxillaofacial Surgery,

# **PRODUCTS**

Continuum™ Bioactive Bone Substitute - Granules

Brand	Description	Microsphere Size	Indications	Volume	REF#
Continuum™	Bioactive Glass Bone Graft Granules	(0,5mm-1mm)	Dental, CMF and ENT	0.25ml/cc	BGG-0251-GS
Continuum™	Bioactive Glass Bone Graft Granules	(0,5mm-1mm)	Dental, CMF and ENT	0.5ml/cc	BGG-0051-GS
Continuum™	Bioactive Glass Bone Graft Granules	(0,5mm-1mm)	Dental, CMF and ENT	1.0ml/cc	BGG-001-GS
Continuum™	Bioactive Glass Bone Graft Granules	(0,5mm-1mm)	Dental, CMF and ENT	2.0ml/cc	BGG-0200-GS
Continuum™	Bioactive Glass Bone Graft Putty	(0,5mm-1mm)	Dental, CMF and ENT	0.25ml/cc	BGG-0251-PS
Continuum™	Bioactive Glass Bone Graft Putty	(0,5mm-1mm)	Dental, CMF and ENT	0.5ml/cc	BGG-0051-PS
Continuum™	Bioactive Glass Bone Graft Putty	(0,5mm-1mm)	Dental, CMF and ENT	1.0ml/cc	BGG-001-PS
Continuum™	Bioactive Glass Bone Graft Putty	(0,5mm-1mm)	Dental, CMF and ENT	2.0ml/cc	BGG-0200-PS

\*Ortho — Orthopedic Surgery \* POrtho Pediatric Orthoped ic Surgery \* COS - Chronic osteomyelitis surgery \* Trauma -Trauma Surgery \* Spine- Spine Surgery \* COMF-Cranio-Oral-Maxillaofacial Surgery \*BBTS- Benign bone tumour surgery \* ENT — Ear, Nose and Throat Surgery OMS — ORAL and Maxillaofacial Surgery.





#### BEYOND FROM WITHIN™

Mavera Medical Devices Inc. does not dispense medical advice and advocates that surgeons be trained in the use of any particular product before using it in surgery. The content presented is intended to identify the breadth of Mavera Medical Devices Inc. product options. A surgeon must always refer to the package insert, product

with all possible care, using the most suitable state-of-the-art processes and applying the principle of integrating safety into its design and manufacture. This system is designed to guarantee the safe use of device when it is employed under condition and for the purposes for which it is intended, in accordance with precautions described in the operator's manual and/or instructions for use and to minimize the risks associated with the use of the device as far as possible, although they cannot be totally eliminated. The device must only be used under the responsibility of specialist medical personnel, taking account of the unavoidable risks and the possible side effects and complications of the treatment for which, it is designed, including those referred to in other sections of these instructions for use.

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