Competitor Fact Sheet: Calcigen® S



For Biocomposites' employees and authorized distributors internal use only.





Feature	STIMULAN®	Calcigen® S Zimmer Biomet®
Composition	Powder: Pharmaceutical-grade CaSO ₄ hemihydrate Mixing solution: Sterile water	Powder: CaSO ₄ dihydrate Mixing solution: Potassium citrate, Sodium phosphate ^{2, 4}
Cleared for infected sites	Yes ¹	No - contraindicated ^{4, 5}
Available sizes	Rapid Cure: 3cc, 5cc, 10cc, 20cc Kit: 5cc, 10cc	5g, 10g, 25g
Product per volume	 3cc box = 6.3g powder 5cc box = 9.5g powder 10cc box = 19.0g powder 20cc box = 38.0g powder 	 5g box (2.5cc powder): Closest to 3cc STIMULAN box 10g box (5cc powder): Closest to 5cc STIMULAN box²
Setting options and times	Rapid Cure: 4 minutes Kit (Standard set): 8 minutes	Standard set: 4-6 minutes at room temperature ⁴
Formats	3 bead sizes, 2 bullet sizes, paste, injectable	Moldable, injectable, beads, blocks, wedges ⁶
Bead and bullet sizes	3.0mm, 4.8mm, 6.0mm beads7.0mm, 9.0mm bullets	 3.0mm, 4.5mm, 6.0mm beads 25x25x12mm, 40x10x10mm, 50x20x10mm blocks 40x15x(7.5,10,12.5,15mm) wedges²
Bead or bullet mat included	 Universal bead mats are included in 5cc, 10cc and 20cc boxes A combination bead and bullet mat is included in the 3cc box A bullet mat and introducer system is available for order 	Supplemental mold tray is available for order ⁶

Feature	STIMULAN®	Calcigen® S Zimmer Biomet®
Impurities	No impurities ²	Unknown
Claimed absorption rate	4-8 weeks ¹	8-12 weeks ^{4, 6}
Fully absorbs	Yes ¹	Unknown
рН	Physiologic ²	Unknown
Hydrophilic or Hydrophobic	Hydrophilic ²	Hydrophilic ²
Third body damage	No third body damage to articulating surfaces ²	May cause third body damage ²
Peer-reviewed evidence	3822	Unknown
Key selling points and weaknesses	 (+) Cleared for use in infected sites¹ (+) Only STIMULAN undergoes a proprietary DRy26® recrystallization method which consists of 26 steps over 6 weeks and results in its consistent and reliable performance³ (+) 100% Pharmaceutical-grade CaSO₄ (+) Aborbs at an optimal rate and leaves no nidus for infection² (+) Fast and standard set options available (+) Contains 2x more product per volume² (+) Comprehensive support network for our customers and hospitals (+) 50,000 cases per year² 	 (+) Flexibility of shapes⁶ (-) Contraindicated for infected sites^{4, 5} (-) Becomes a calcium phosphate when fully set - potential to be a nidus for infection² (-) Precaution for treating patients with impaired potassium metabolism^{4, 5} (-) No fast setting option available (-) Setting time is temperature dependent⁴ (-) Contains 1/2 less product per volume² * (+) = competitor selling points (-) = competitor weaknesses

References

- I. Biocomposites Ltd, STIMULAN Instructions for Use.
- 2. Biocomposites, Data on file.
- 3. Cooper, J.J., Method of producing surgical grade calcium sulphate; Patent. 1999.
- $4.\ Biomet\ Calcigen^{\text{TM}}\ S\ Calcium\ Sulfate\ Bone\ Void\ Filler\ Instructions\ for\ Use.\ OI-50-I090.\ Rev\ C\ 20II-06.$
- 5. Biomet Orthopedics, Inc. Calcigen™ S Calcium Sulfate Bone Void Filler Precautionary Statement. 0I-50-I090 04/04.
- 6. Zimmer Biomet Calcigen® S Calcium Sulfate Bone Void Filler Fact Sheet. 1940.1-US-en-0718.

For indications, contraindications, warnings and precautions see Instructions for Use. Concurrent use of locally administered antibiotics may affect setting time. This brochure may include the use of STIMULAN or techniques that go beyond the current clearance/approval granted by the relevant regulatory authority. Please contact your local representative for further information.

©2020, Biocomposites, STIMULAN, Bringing Calcium to Life, Power to Transform and DRy26 are trademarks/registered trademarks of Biocomposites Ltd. All rights reserved. No unauthorized copying, reproduction, distributing or republication is allowed unless prior written permission is granted by the owner, Biocomposites Ltd.

Patents granted: GB2367552, EP I204599 BI, US 678039I, EP 259423I BI, US 88883063, CN ZL20I2I0466II7.X, GB24967I0, EP 3058899 BI, US I0390954 Patents pending: GBI502655.2, US I5/040075, CN 20I6I00897I0.5, GBI704688.9, EP I8275044.8, US I5/933936, CN I086I9579A