

# Actifuse™ MIS

Reaching New Levels in Synthetic Bone Grafting



The Actifuse MIS cartridge contains Actifuse ABX, a mouldable, cohesive and versatile bone graft that provides:

- Optimised, osteostimulative scaffold that accelerates bone formation<sup>1,2,3</sup>
- Excellent handling that saves time and improves placement
- Consistent quality bone graft designed to stay at the operative site<sup>4,5</sup>
- Cell mediated scaffold resorption leads to rapid, effective repair<sup>3</sup>

Applicator plus  
1 x 7.5ml Cartridge  
Product Code - 8069

Refill Cartridge  
1 x 7.5ml  
Product Code - 8071

#### References:

1. Hing K. *et al.* Biomaterials 2006; 27: 5014-5026
2. Hing K. *et al.* The Spine Journal 2007; 7(4): 475-490
3. Wheeler D. *et al.* The Spine Journal 2007; 7(3): 308-317
4. Data on File. ApaTech 2006
5. Data on File. ApaTech 2007

#### Key Design Features

- Transparent cartridge for easy visualisation
- Simple bayonet fitting for cartridge attachment
- Textured grip for use in wet environments
- Device reset by holding in trigger and pulling back ram



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# Actifuse™ MIS

Silicate substituted synthetic bone graft



Reaching New Levels in Synthetic Bone Grafting

More bone, less time



# Actifuse™ MIS

Reaching New Levels in Synthetic Bone Grafting

Ideal for use in a range of spine and orthopaedic procedures:



Posterolateral Fusion



Interbody Fusion



## Actifuse MIS provides:

- Unprecedented access in open and minimally invasive procedures
- A unique, purpose designed applicator for controlled delivery
- Flexible, replaceable cartridges for fast and precise graft placement

Cartridge Working Length	20cm / 8inches
Cartridge Outside Diameter	8mm
Cartridge Fill Volume	7.5ml
Delivery Volume (Metered Dose)	
• Full Squeeze	0.5ml
• Part Squeeze	0.2ml



Tumour/Bone Void Filling



Acetabular Cysts



Fracture Repair

## Actifuse - Scientific References

1. Enhanced Protein Adhesion  
Rashid et al. European Society for Biomaterials, Sorrento 2005
2. Greater Cellular Attachment  
Guth K. et al. European Society for Biomaterials, Sorrento, 2005
3. Faster Proliferation/Differentiation  
Guth K. et al. Bioceramics, Kyoto, 2005
4. Greater Extracellular Matrix Production  
Guth K. et al. Bioceramics, Kyoto, 2005
5. Faster Woven Bone Formation  
Hing K. et al. The Spine Journal 2007; 7(4):475-490
6. Earlier Commencement of Re-modelling  
Hing K. et al. The Spine Journal 2007; 7(4):475-490
7. Earlier Lamellar Bone Formation  
Hing K. et al. The Spine Journal 2007; 7(4):475-490
8. Earlier Completion of Bone Formation Cascade  
Hing K. et al. The Spine Journal 2007; 7(4):475-490  
Wheeler D. et al. The Spine Journal 2007; 7(3):308-317

## Actifuse - Clinical References

- Dr Louis Jenis**  
Clinical & Radiographic Evaluation of Silicate Substituted Calcium Phosphate Ceramic in Posterolateral Fusion (CT)  
*Actifuse + BMA is equivalent to Iliac Crest Autograft*  
AAOS San Francisco 2008
- Dr Patrick Connolly**  
Treatment of Degenerative Spinal Pathology Utilizing Silicated Calcium Phosphate in Posterolateral Lumbar Fusion  
*Fusion rate of 96% at 12 months (X-Ray, CT)*  
IMAST Bahamas 2007
- Dr Luiz Pimenta**  
Experience with the use of Silicated Calcium Phosphate in Lumbar Interbody Fusion Procedures 2 year Follow Up  
*Fusion rate of 93% at 24 months (X-Ray, CT)*  
CNS San Diego 2007
- Dr Brad Prybis**  
A Prospective Evaluation Utilizing Silicated Calcium Phosphate Bone Graft For Lumbar Fusions  
*Fusion rate of >91% (PLF); >80% (TILF) at 12 months (X-Ray, CT)*  
Available from ApaTech 2008
- Dr Michael Wang**  
Use of Silicated Bone Graft to Promote Cervical Interbody Fusion: Clinical and Radiographic Results  
*Fusion rate of 97% (X-Ray)*  
CNS San Diego 2007
- Dr Walter Eckman**  
Case Report: Successful 4 level Anterior Cervical Fusion Using Silicated Calcium Phosphate  
*Fusion of all 4 levels at 13 months (X-Ray)*  
Available from ApaTech 2008
- Anterior Cervical Interbody Fusion with Silicated Calcium Phosphate Bone graft substitute**  
*Fusion rate of 97% at 10-21 months (X-Ray, CT)*  
Available from ApaTech 2008
- Dr Paul Arnold**  
Use of a Silicate-Substituted Calcium Phosphate for Anterior Cervical Fusion: Initial Results of a Prospective Study  
*Fusion rate of 100% at 6 months (CT)*  
CNS / AANS Joint Sections Orlando 2008