# **Specification**

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Model	DS4A-050	DS4C-050	DS4E-050	DS4A-060	DS4C-060	DS4E-060			
Volume	5ml			6ml					
Length of the tips	5cm	10cm	15cm	5cm	10cm	15cm			
Model	DS4A-080	DS4C-080	DS4E-080	DS4A-100	DS4C-100	DS4E-100			
Volume	8ml			10ml					
Length of the tips	5cm	10cm	15cm	5cm	10cm	15cm			
Model	D\$2A-050	DS2C-050	DS2F-050	DS2A-060	DS2C-060	DS2E-060			
Volume	D32A 030	5ml	D32L 030	D32A 000	6ml	D32L 000			
Length of the tips	5cm	10cm	15cm	5cm	10cm	15cm			
Length of the tips	JCIII	100111	13011	JCIII	100111	13011			
Model	DS2A-080	DS2C-080	DS2E-080	DS2A-100	DS2C-100	DS2E-100			
Volume		8ml			10ml				
Length of the tips	5cm	10cm	15cm	5cm	10cm	15cm			
Model	DS-05	DS-050 DS-060		DS-080 DS-100		DS-100			
Volume	5ml	5ml 6ml		8ml		10ml			
Model	DSA-050	DSC-050	DSE-050	DSA-060	DSC-060	DSE-060			
Volume		5ml		6ml					
Length of the tips	5cm	10cm	15cm	5cm	10cm	15cm			
Model	DSA-080	DSC-080	DSF-080	DSA-100	DSC-100	DSF-100			



Length of the tips5cm10cm15cm5cm10cm15cm

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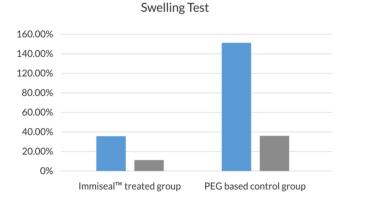
**MEDPRIN** Immiseal **Dural Sealant System** Quick gel-forming Absorbable **♦** Low swelling ratio Easy application ♦ Water-tight seal • Shorter surgery time



### Lower swelling ratio

Reduces mass effects thus compression of brain tissue.

Raw material - lower molecular weight which presents lower swelling ratio than the other PEG based product.



Mass swelling ratio of Immiseal™ is lower than 40% judged by the weight of absorbed water.

#### Degradation within 21 days

Pre-clinical study shows Immiseal™ degrades approximately within 21 days, which meets the clinical need of cranial closure and prevents long-term mass effect to promote tissue regeneration.

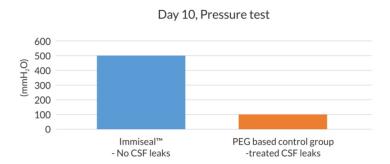
## **Quick gelation**



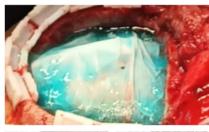
Quick gel-forming within **SECONDS** 

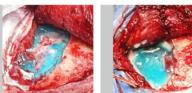
## CSF leakage prevention

Pressure tests were performed in pre-clinical canine model of cranial surgery. Immiseal™ exhibited strong tissue sealing to provide a mechanical CSF barrier.



At 10 days post-surgery, Immiseal - treated group provided a 100% water-tight closure when the intracranial pressure(ICP) was increased to 500 mmH<sub>2</sub>O by injecting normal saline, while CSF leakage occurred in alternative-treated group when ICP increased to 102 mmH<sub>2</sub>O.





Applied in tumor resection surgeries

#### Clinical trial - CSF leakage prevention rate at post-operation 7±3 days

	PPS				
Parameter	Test group				
Fail number (%)	0(0.00%)				
Successful number (%)	65(100.00%)				
Total (Missing)	65(0)				
95% CI for the rate in a single group	(94.42%,100.00%)				

Note: 95% CI for the rate was calculated based on Wilson score.

Step 1

## Easy surgical handling



The injection syringe is assembled before use, which greatly simplifies the procedures.



Connect two vials to the syringes, and shake several times to mix the materials.





#### **EASY TO USE**

Remove the vials, install the applicator, and the sealant system is all set.



Skip the thawing process

Immiseal™ stored below 30°C/86°F, ready for any urgent situation