## **Septa**

#### **Septum Without CenterGuide**





Septum With CenterGuide





CenterGuide can help reduce coring when used with tapered (rounded-tip) needles.

# **Premium Septa**

Premium Septa are preconditioned and packed in glass jars. Premium septa generally have much lower bleed than general purpose septa.

#### CenterGuide™ Septa for Improved Performance

- Center point guides the needle for easy penetration
- · Reduce needle bending
- Precision molding assures accurate fit
- · Available in selected sizes of our premium septa

Precision-molded septa have a recess on the injection side, to guide the syringe needle to the same point with every injection. The CenterGuide design requires less force for initial penetration, for a smoother feel. Septum life may be enhanced in some applications by minimizing tearing and coring.

Septum	High Temperature	Pre- pierced	Low Bleed	Suggested Applications
Marathon™	✓	✓	•	Autosampler use; pre-pierced greater reliability, trace analysis
BTO®	✓	•	✓	High injection port temperature, lowest bleed, trace analysis
Advanced Green 3™	✓	•	•	General purpose use; low sticking

Upper Temperature Limit: Septa BTO, Marathon and Advanced Green 3 can be used at 400°C and injector set point temperatures in most instruments. Slight sticking may occur in new injection ports when holding septa above 300°C over many days.



## Septa Cross Reference

5700 series, 5830/40       9.5 mm         On-column injection       5 mm         Purged packed column       11 mm         Fisons/Carlo Erba       8000 Series       17 mm         PerkinElmer       Sigma Series, 8000 Series, Clarus       11 mm         AutoSystem/AutoSystem XL       11 mm         Shimadzu       9A, 14, 15A, 16, 17A, 2010 & 2014       Plug         Thermo Instruments       17 mm         9001, GCQ       9 mm         PTV Injector       12.7 mm         Varian       1177 Injector       9 mm         1040/41/60/61       9.5 mm	Instrument	Septum Size
5700 series, 5830/40       9.5 mm         On-column injection       5 mm         Purged packed column       11 mm         Fisons/Carlo Erba       8000 Series       17 mm         PerkinElmer       Sigma Series, 8000 Series, Clarus       11 mm         AutoSystem/AutoSystem XL       11 mm         Shimadzu       9A, 14, 15A, 16, 17A, 2010 & 2014       Plug         Thermo Instruments       17 mm         9001, GCQ       9 mm         PTV Injector       12.7 mm         Varian       1177 Injector       9 mm         1040/41/60/61       9.5 mm	Agilent/HP	
On-column injection         5 mm           Purged packed column         11 mm           Fisons/Carlo Erba         8000 Series         17 mm           PerkinElmer         Sigma Series, 8000 Series, Clarus         11 mm           AutoSystem/AutoSystem XL         11 mm           Shimadzu         9A, 14, 15A, 16, 17A, 2010 & 2014         Plug           Thermo Instruments         17 mm           Trace, Focus Split/Splitless, 8000 Series         17 mm           9001, GCQ         9 mm           PTV Injector         12.7 mm           Varian         1177 Injector         9 mm           1040/41/60/61         9.5 mm	5880A, 5890, 6850, 6890, 7890, 7890A, & 7820A	11 mm
Purged packed column         11 mm           Fisons/Carlo Erba         8000 Series         17 mm           PerkinElmer         Sigma Series, 8000 Series, Clarus         11 mm           AutoSystem/AutoSystem XL         11 mm           Shimadzu         9A, 14, 15A, 16, 17A, 2010 & 2014         Plug           Thermo Instruments         17 mm           Trace, Focus Split/Splitless, 8000 Series         17 mm           9001, GCQ         9 mm           PTV Injector         12.7 mm           Varian         1177 Injector         9 mm           1040/41/60/61         9.5 mm	5700 series, 5830/40	9.5 mm
Fisons/Carlo Erba 8000 Series 17 mm  PerkinElmer Sigma Series, 8000 Series, Clarus 11 mm AutoSystem/AutoSystem XL 11 mm  Shimadzu 9A, 14, 15A, 16, 17A, 2010 & 2014 Plug  Thermo Instruments Trace, Focus Split/Splitless, 8000 Series 17 mm 9001, GCQ 9 mm PTV Injector 12.7 mm  Varian 1177 Injector 9 mm 1040/41/60/61 9.5 mm	On-column injection	5 mm
17 mm   17 mm   17 mm   18000 Series   17 mm   1040/41/60/61   11 mm   11 mm   11 mm   11 mm   11 mm   12 mm	Purged packed column	11 mm
PerkinElmer         Sigma Series, 8000 Series, Clarus       11 mm         AutoSystem/AutoSystem XL       11 mm         Shimadzu       9A, 14, 15A, 16, 17A, 2010 & 2014       Plug         Thermo Instruments       17 mm         Trace, Focus Split/Splitless, 8000 Series       17 mm         9001, GCQ       9 mm         PTV Injector       12.7 mm         Varian       1177 Injector       9 mm         1040/41/60/61       9.5 mm	Fisons/Carlo Erba	
Sigma Series, 8000 Series, Clarus       11 mm         AutoSystem/AutoSystem XL       11 mm         Shimadzu       9A, 14, 15A, 16, 17A, 2010 & 2014       Plug         Thermo Instruments         Trace, Focus Split/Splitless, 8000 Series       17 mm         9001, GCQ       9 mm         PTV Injector       12.7 mm         Varian       1177 Injector       9 mm         1040/41/60/61       9.5 mm	8000 Series	17 mm
AutoSystem/AutoSystem XL 11 mm  Shimadzu 9A, 14, 15A, 16, 17A, 2010 & 2014 Plug  Thermo Instruments Trace, Focus Split/Splitless, 8000 Series 17 mm  9001, GCQ 9 mm  PTV Injector 12.7 mm  Varian 1177 Injector 9 mm  1040/41/60/61 9.5 mm	PerkinElmer	
Shimadzu  9A, 14, 15A, 16, 17A, 2010 & 2014  Plug  Thermo Instruments  Trace, Focus Split/Splitless, 8000 Series  17 mm  9001, GCQ  9 mm  PTV Injector  12.7 mm  Varian  1177 Injector  9 mm  1040/41/60/61  9.5 mm	Sigma Series, 8000 Series, Clarus	11 mm
9A, 14, 15A, 16, 17A, 2010 & 2014  Thermo Instruments  Trace, Focus Split/Splitless, 8000 Series  17 mm  9001, GCQ  9 mm  PTV Injector  12.7 mm  Varian  1177 Injector  9 mm  1040/41/60/61  9.5 mm	AutoSystem/AutoSystem XL	11 mm
9A, 14, 15A, 16, 17A, 2010 & 2014  Thermo Instruments  Trace, Focus Split/Splitless, 8000 Series  17 mm  9001, GCQ  9 mm  PTV Injector  12.7 mm  Varian  1177 Injector  9 mm  1040/41/60/61  9.5 mm		
Thermo Instruments  Trace, Focus Split/Splitless, 8000 Series 17 mm 9001, GCQ 9 mm  PTV Injector 12.7 mm  Varian 1177 Injector 9 mm 1040/41/60/61 9.5 mm	Shimadzu	
Trace, Focus Split/Splitless, 8000 Series       17 mm         9001, GCQ       9 mm         PTV Injector       12.7 mm         Varian       9 mm         1177 Injector       9 mm         1040/41/60/61       9.5 mm	9A, 14, 15A, 16, 17A, 2010 & 2014	Plug
9001, GCQ 9 mm PTV Injector 12.7 mm  Varian 1177 Injector 9 mm 1040/41/60/61 9.5 mm	Thermo Instruments	
PTV Injector       12.7 mm         Varian       9 mm         1040/41/60/61       9.5 mm	Trace, Focus Split/Splitless, 8000 Series	17 mm
Varian 1177 Injector 9 mm 1040/41/60/61 9.5 mm	9001, GCQ	9 mm
1177 Injector 9 mm 1040/41/60/61 9.5 mm	PTV Injector	12.7 mm
1177 Injector 9 mm 1040/41/60/61 9.5 mm		
1040/41/60/61 9.5 mm	Varian	
	1177 Injector	9 mm
1075/77/78, 1079, 1093/94 SPI 11.5 mm	1040/41/60/61	9.5 mm
	1075/77/78, 1079, 1093/94 SPI	11.5 mm

Measuring Chart			
5 mm / 3/16"			
7 mm / 9/32"			
9 mm / 11/32"			
9.5 mm / 3/8"			
10 mm / 13/32"			
11 mm / 7/16"			
12.5 mm / 1/2"			
12.3			
17 mm / 21/32"			

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# **Septa**



BTO 11mm Septa

## Septa BTO®

- Extended temperature range, low-bleed
- Maximum temperature 400°C\*
- · Virtually eliminates injection-port sticking
- Pre-conditioned; packaged in glass to prevent contamination
- Each batch GC-FID tested
- · Ideal for use with low-bleed, "Mass Spec" capillary columns

Septa BTO is Bleed and Temperature Optimized for today's most demanding GC and GC/MS applications. Septa BTO is formulated to extend low-bleed and outstanding mechanical properties of premium GC septa to the highest-temperature applications. It retains remarkable softness and pierceability at high temperatures, with extremely low bleed. Septa are 3 mm thick, except Shimadzu-style plug septa, and are packaged in glass vials.

Description	Qty	Item No.
5 mm BTO CenterGuide™	50/pk	298787
1/4" (6.4 mm) BTO	50/pk	298755
9 mm BTO CenterGuide	50/pk	298713
3/8" (9.5 mm) BTO	50/pk	298705
10 mm BTO	50/pk	298745
7/16" (11 mm) BTO CenterGuide	50/pk	298717
7/16" (11 mm) BTO CenterGuide	100/pk	298718
11.5 mm BTO CenterGuide	50/pk	298777
1/2" (12.7 mm) BTO CenterGuide	50/pk	298727
17 mm BTO CenterGuide*	50/pk	298817
BTO for Shimadzu	50/pk	298735

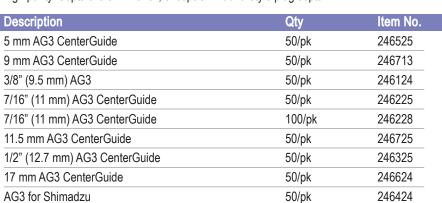
<sup>\*</sup> For 17mm injectors the maximum is 300°C



#### Advanced Green 3™

- True low-bleed, high temperature green septum
- Maximum temperature 400°C

The CRS Advanced Green 3 Septum was specifically created to combine significantly longer injection life, low bleed and low injection port adhesion. The result is a green septum you can use for all your critical analyses. Advanced Green 3 Septa are packaged in glass vials for high purity. Septa are 3 mm thick, except Shimadzu-style plug septa.





AG3 11mm Septa

#### Marathon™ Septa

- Excellent Performance with Long Injection Life
- Pre-pierced for greater reliability
- · Premium septum for autosamplers
- CenterGuide™ Marathon are pre-pierced for extremely reliable performance
- Maximum temperature setting 400°C

The CenterGuide versions of Marathon are pre-pierced to channel the needle through the same spot with each injection, which helps eliminate the common type of coring that occurs on the first injection. The Marathon septum is also ideal for standard manual-injection GC and GC/MS. Septa are 3 mm thick, except Shimadzu-style plug septa. Septa are packaged in glass jars.

Description	25/pk	50/pk	100/pk
5 mm Marathon CenterGuide	239587	239597	
9 mm Marathon CenterGuide	239778	239779	
7/16" (11 mm) Marathon CenterGuide	239287	239297	239888
11.5 mm Marathon CenterGuide	239787	239798	
1/2" (12.7 mm) Marathon CenterGuide	239387	239397	
17 mm Marathon	239688	239698	
Shimadzu	239488	239498	



Marathon 11mm Septa

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## **General-Purpose Septa**

### Puresep T™

- The better PTFE coated septum
- Recommended maximum temperature is 225°C

Silicone-based septum is faced on one side with a double layer of polyimide and PTFE. The polyimide adheres to both the silicone and PTFE, providing a better bond and enhanced durability. The outer PTFE coating assures maximum inertness and helps minimize bleed.

Description	Qty	Item No.
1/4" (6.0 mm) Puresep T	50/pk	230665
3/8" (9.5 mm) Puresep T	50/pk	230675
7/16" (11 mm) Puresep T	50/pk	230685
11.5 mm Puresep T	50/pk	230697
1/2" (12.7 mm) Puresep T	50/pk	230695
13 mm Puresep T	50/pk	230698



- Made from silicone rubber coated with a layer of high-temperature polyimide

The polyimide layer is stable to 400°C, however the recommended upper limit for the septum as a whole is 300°C, due to the characteristics of silicone.

Description	Qty	Item No.
1/4" (6.0 mm) Puresep P	50/pk	230630
3/8" (9.5 mm) Puresep P	50/pk	230640
7/16" (11 mm) Puresep P	50/pk	230650
11.5 mm Puresep P	50/pk	230670
1/2" (12.7 mm) Puresep P	50/pk	230660
13 mm Puresep P	50/pk	230680



Puresep T



Puresep P



## **Economy Blue Septa**

Our Blue Septa are designed for non-demanding, routine applications. They are easy to penetrate, with a durometer rating of 40 - 45. The septa can be used up to 250°C and are suitable for 90% of all GC analyses. Made from silicone.

Description	Qty	Item No.
1/4" (6.4 mm) Economy Blue Septa	100/pk	234625
3/8" (9.5 mm) Economy Blue Septa	100/pk	234905
7/16" (11 mm) Economy Blue Septa	100/pk	234115
1/2" (12.7 mm) Economy Blue Septa	100/pk	234125



Economy Blue Septa

## **Accessories**

#### Injection Port Cleaning Kit

This is designed for cleaning all GC injection ports, including those in Shimadzu instruments. Included are three stainless steel brushes, 5 mm (for Shimadzu), 1/4" and 3/8", and one scraper for removing septum residue.

Description	Item No.
Injection Port Cleaning Kit	206211



## Septa Pick

The Septa Pick is useful for removing small pieces of septa lodged in the threads and corners of the septum cap or injection port. It can also be used to remove small bits of graphite ferrule from the cap and fittings of column connectors; other small cleaning jobs.

Description	Item No.
Septa Pick	205465



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