

Developed, Tested, Proven



The Right Syringe for Your Autosampler

- PAL RTC Instruments from CTC Analytics
- Comprehensive range for both GC and LC applications

PAL SYSTEM

SGE Analytical Science
www.sge.com

Achieve the best results from your RTC instrument by using syringes designed and developed in collaboration with the instrument manufacturer.

Durability, Accuracy, and Clarity

Syringes for PAL RTC Instruments from CTC Analytics.

- Diamond syringe benefits, including longer syringe life, improved solvent resistance, greater temperature range and increased operational smoothness.
- Vibrant color scheme – distinct color-by-volume system for easy identification of installed syringes.
- Comprehensive range:
 - 500 nL – 10 mL
 - Fixed and removable needle options
 - Metal and PTFE tipped (gas tight) plunger options
 - GC and LC syringes
 - Headspace applications
 - Standard (57 mm), Extended (85 mm) and Headspace (65 mm) needle lengths



Feature	Benefit
Developed in collaboration with the instrument manufacturer	Confidence the syringe specifications perfectly match your instrument's requirements
Plunger button adjustment	Improved accuracy and precision, lower dead volume
Metal or replaceable PTFE- tipped (gas tight) plungers	Application specific choice, offering improved chemical compatibility and reduced overall costs (replace PTFE-tipped plunger rather than entire syringe)
Ultra-smooth internal glass barrel surface	Reduces potential for carryover Improves the cleanability and therefore longevity of the syringe
Replaceable needle option	Increased application specific flexibility Reduced overall costs (replace the needle rather than the entire syringe)
Color coded syringes	Syringe is easy to identify, even when installed in an instrument



For more information:

- For PAL RTC LC Syringes visit www.sge.com/rtc-lc
- For PAL RTC GC Syringes visit www.sge.com/rtc-gc

PAL SYSTEM

Syringe Volume	PTFE Tipped Plunger	Needle Length (mm)	Needle Gauge	Needle OD (mm)	Needle ID (mm)	Needle Tip	Replaceable Needle	Replacement Needle Part No.	Replacement Plunger Part No.	Syringe Part No.
0.5 µL	-	57	23	0.63		Cone	✓	033780*	-	000480
1 µL	-	57	23	0.63		Cone	✓	034780*	-	000680
5 µL	-	57	26	0.47	0.11	Cone	-	-	-	001865
5 µL	-	57	23	0.63	0.11	Cone	-	-	-	001861
5 µL	-	85	26	0.47	0.11	Cone	-	-	-	001867
5 µL	-	85	23	0.63	0.11	Cone	-	-	-	001863
10 µL	-	57	26	0.47	0.11	Cone	-	-	-	002865
10 µL	✓	57	26	0.47	0.11	Cone	-	-	032810	002866
10 µL	-	57	23	0.63	0.11	Cone	-	-	-	002861
10 µL	✓	57	23	0.63	0.11	Cone	-	-	032810	002862
10 µL	-	85	26	0.47	0.11	Cone	-	-	-	002867
10 µL	✓	85	26	0.47	0.11	Cone	-	-	032810	002868
10 µL	-	85	23	0.63	0.11	Cone	-	-	-	002863
10 µL	✓	85	23	0.63	0.11	Cone	-	-	032810	002864
25 µL	✓	57	26	0.47	0.11	Cone	-	-	032815	003866
25 µL	✓	57	23	0.63	0.11	Cone	-	-	032815	003862
25 µL	✓	85	26	0.47	0.11	Cone	-	-	032815	003868
25 µL	✓	85	23	0.63	0.11	Cone	-	-	032815	003864
50 µL	✓	57	26	0.47	0.11	Cone	-	-	032821	004866
50 µL	✓	57	23	0.63	0.11	Cone	-	-	032821	004862
50 µL	✓	85	26	0.47	0.11	Cone	-	-	032821	004868
50 µL	✓	85	23	0.63	0.11	Cone	-	-	032821	004864
100 µL	✓	57	26	0.47	0.11	Cone	-	-	032825	005866
100 µL	✓	57	23	0.63	0.11	Cone	-	-	032825	005862
100 µL	✓	57	23	0.63	0.32	Side Hole	-	-	032825	005890
100 µL	✓	85	26	0.47	0.11	Cone	-	-	032825	005868
100 µL	✓	85	23	0.63	0.11	Cone	-	-	032825	005864
100 µL	✓	85	23	0.63	0.32	Side Hole	-	-	032825	005891
250 µL	✓	57	26	0.47	0.20	Cone	-	-	032831	006866
250 µL	✓	57	23	0.63	0.32	Cone	-	-	032831	006862
250 µL	✓	57	23	0.63	0.32	Side Hole	-	-	032831	006890
250 µL	✓	85	26	0.47	0.20	Cone	-	-	032831	006868
250 µL	✓	85	23	0.63	0.32	Cone	-	-	032831	006864
250 µL	✓	85	23	0.63	0.32	Side Hole	-	-	032831	006891
500 µL	✓	57	23	0.63	0.32	Cone	-	-	032835	007862
500 µL	✓	57	23	0.63	0.32	Side Hole	-	-	032835	007890
500 µL	✓	57	26	0.47	0.20	Cone	-	-	032835	007866
500 µL	✓	85	23	0.63	0.32	Cone	-	-	032835	007864
500 µL	✓	85	23	0.63	0.32	Side Hole	-	-	032835	007891
500 µL	✓	85	26	0.47	0.20	Cone	-	-	032835	007868
1 mL	✓	57	22	0.72	0.41	LC	-	-	032842	008150
1 mL	✓	65	23	0.63	0.32	Side Hole	-	-	032841	008155
2.5 mL	✓	65	23	0.63	0.32	Side Hole	-	-	032846	008655
10 mL	✓	57	19	1.07	0.65	LC	-	-	032855	008950

* Replacement needle and plunger kit.

New Potential in Headspace Analysis

With Diamond Headspace Syringes for PAL RTC Instruments from CTC Analytics, achieve outstanding reproducibility while saving time, and improving workflow.

- Reproducibility - a unique energized plunger tip design ensures a gas tight seal is consistently maintained providing outstanding performance and longevity with temperature cycling.
- Operating temperature – premium performance continues even when temperature cycling up to 150 °C.
- Save time and improve workflow – extended equilibration times are not required. Reduced carryover minimizes the time used flushing and washing syringes.



Syringe Volume	PTFE Tipped Plunger	Needle Length (mm)	Needle Gauge	Needle OD (mm)	Needle ID (mm)	Needle Tip	Replaceable Needle	Replacement Needle Part No.	Replacement Plunger Part No.	Syringe Part No.
1 mL	✓	65	23	0.63	0.32	Side Hole	-	-	032841	008155
2.5 mL	✓	65	23	0.63	0.32	Side Hole	-	-	032846	008655