

SGE Replacement Part Numbers for Hamilton Syringes

The following table is a replacement guide that can be used to determine the SGE equivalent syringe to a Hamilton part number.

Hamilton P/N	SGE Description	SGE P/N
202668	100R-C/T-GT-LC	005330
203043	25F-CTC-GT-5/0.47C	003700
203072	10F-CTC-5/0.47BV	002705
203073	10F-CTC-LC	002710
203074	25F-C/T-0.47C	003980
203075	25F-CTC-GT-LC	003715
203076	100F-CTC-GT-5/0.47C	005700
203077	100F-C/T-GT-LC	005331
203078	250F-CTC-GT-5/0.47C	006700
203079	250F-CTC-GT-LC (0.4)	006720
203080	500F-CTC-GT-5/0.47C	007700
203081	2.5MF-CTC-GT-HS-0.47H	008635
203082	1MF-CTC-GT-HS-0.63H	008130
203083	2.5MR-CTC-GT-LC(0.41)	008620
203084	2.5MF-CTC-GT-HS-0.63H	008630
203085	5MR-CTC-GT-LC(0.41)	008820
203141	1MF-CTC-GT-HS-0.47H	008135
203181	1MR-CTC-GT-LC(0.41)	008120
203189	5F-C/T-5/0.47	001982
203194	10F-C/T-GT-LC	002991
203205	10F-C/T-5/0.47C	002980
203235	100F-CTC-GT-LC (0.4)	005720
203274	25F-C/T-LC	003984
203349	500F-CTC-GT-LC (0.4)	007720
203361	10F-C/T-0.63	002981

Color Coding for SGE CTC Syringes.

Color	Syringe Volumes
Yellow	1 mL
Grey	250 µL, 2.5 mL
Lime	5 µL, 5 mL
Dark Orange	10 µL

Color	Syringe Volumes
Green	25 µL
Purple	50 µL
Aqua	100 µL
Light Orange	500 nL (0.5 µL), 500 µL

Syringes for CTC Analytics CombiPAL and GC PAL.

Specifications	
Accuracy and Reproducibility	± 1%(dispensed volume) (± 2% for 0.5µL and 1µL syringes)
Borosilicate Glass Barrel Outer Diameter (OD)	0.5µL to 100µL = 6.5mm, 250µL and 500µL = 8mm, 1 mL = 7.6mm, 2.5 mL = 9.7mm
Scale Length	0.5µL = 27.05mm, 5µL to 10µL = 54.1mm, 25µL to 5mL = 60mm
International Standards Traceability	

Needle Gauge	Needle OD (mm)	Needle Length (mm)	Needle Tip	Barrel OD (mm)	PTFE Plunger Seal	Description	Part Number	Pack Size	Replacement Needle	Replacement Plunger
0.5 µL Removable Needle										
26	0.47	50	Cone	6.5	-	0.5BNR-C/T-0.47C	000490	1	033770	-
23	0.63	50	Cone	6.5	-	0.5BNR-C/T-0.63C	000492	1	033772	-
5 µL Fixed Needle										
26	0.47	50	Cone	6.5	-	5F-CTC-5/0.47C	001700	1	-	-
23	0.63	50	Cone	6.5	-	5F-C/T-5/0.63C	001981	1	-	-
5 µL Removable Needle										
23	0.63	50	Cone	6.5	-	5R-C/T-0.63C	001984	1	036011	-
10 µL Fixed Needle										
26	0.47	50	Cone	6.5	✓	10F-C/T-GT-5/0.47C	002977	1	-	031803
26	0.47	50	Cone	6.5	✓	SK-10F-C/T-GT-5/0.47C	002976	6	-	031803
26	0.47	50	Cone	6.5	-	10F-CTC-5/0.47C	002700	1	-	-
26	0.47	50	Bevel	6.5	-	10F-CTC-5/0.47BV	002705	1	-	-
23	0.63	50	Cone	6.5	-	10F-C/T-5/0.63C	002981	1	-	-
23	0.63	50	Cone	6.5	-	SK-10F-C/T-5/0.63C	002971	6	-	-
23	0.63	50	Cone	6.5	✓	10F-C/T-GT-5/0.63C	002987	1	-	031803
23	0.63	50	Cone	6.5	✓	SK-10F-C/T-GT-5/0.63C	002972	6	-	031803
22	0.72	50	Side-Hole	6.5	✓	10F-CTC-GT-5/0.72H	002983	1	-	0318921
10 µL Removable Needle										
26	0.47	50	Cone	6.5	-	10R-C/T-5/0.47C	002982	1	037785	-
26	0.47	50	Cone	6.5	✓	10R-C/T-GT-0.47C	002985	1	037785	0318121
23	0.63	50	Cone	6.5	-	10R-C/T-0.63C	002984	1	037787	-
23	0.63	51.5	Cone	6.5	✓	10R-C/T-GT-5.15/0.63C	002965	1	037013	0318121
25 µL Fixed Needle										
26	0.47	50	Cone	8	✓	25F-CTC-GT-5/0.47C	003700	1	-	0318921
26	0.47	50	Cone	6.5	-	25F-C/T-0.47C	003980	1	-	-
23	0.63	50	Cone	6.5	✓	25F-C/T-GT-0.63C	003987	1	-	031817
25 µL Removable Needle										
26	0.47	50	Side-Hole	6.5	✓	25R-C/T-GT-0.47H	003988	1	038749	031816
22	0.72	50	Side-Hole	6.5	✓	25R-C/T-GT 0.72H	003989	1	038420	031816
100 µL Fixed Needle										
26	0.47	50	Cone	6.5	✓	100F-CTC-GT-5/0.47C	005700	1	-	0318924
23	0.63	50	Cone	6.5	✓	100F-C/T-GT-0.63C	005335	1	-	0318261
100 µL Removable Needle										
26	0.47	50	Cone	6.5	✓	100R-C/T-GT-0.47C	005333	1	038732	031826
23	0.63	50	Side-Hole	6.5	✓	100R-C/T-GT-0.63H	005337	1	038736	031826
250 µL Fixed Needle										
26	0.47	50	Cone	7.6	✓	250F-CTC-GT-5/0.47C	006700	1	-	0318926
500 µL Fixed Needle										
26	0.47	50	Cone	7.6	✓	500F-CTC-GT-5/0.47C	007700	1	-	0318928
1 mL Fixed Needle Headspace										
26	0.47	56	Side-Hole	7.6	✓	1MF-CTC-GT-HS-5/0.47H	008135	1	-	0318441
23	0.63	56	Side-Hole	7.6	✓	1MF-CTC-GT-HS-5/0.63H	008130	1	-	0318441
2.5 mL Fixed Needle Headspace										
26	0.47	56	Side-Hole	9.7	✓	2.5MF-CTC-GT-HS-5/0.47H	008635	1	-	0318451
23	0.63	56	Side-Hole	9.7	✓	2.5MF-CTC-GT-HS-5/0.63H	008630	1	-	0318451



Syringes for CTC Analytics Instruments

The NEW Diamond Syringe Range for CTC Analytics Instruments from SGE offers a never before seen level of **Durability, Clarity and Accuracy**. No other syringe range provides such brilliance!

www.sge.com



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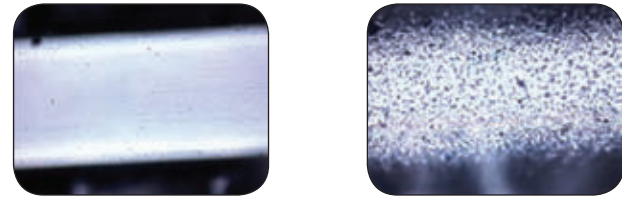


Durability

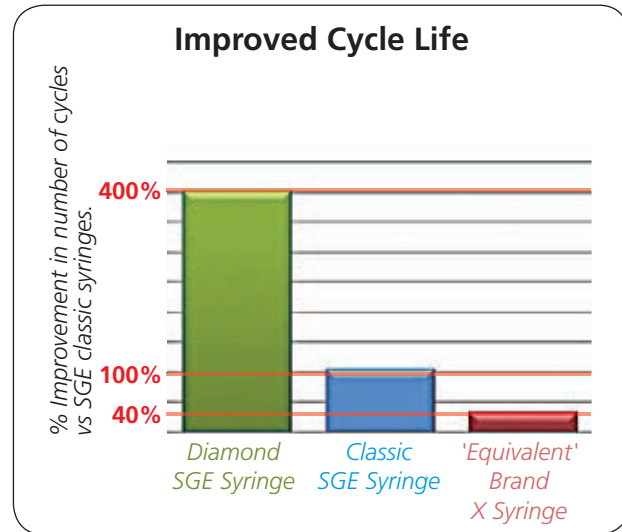
Enhancements to the SGE Diamond Syringes result in:

- Improved solvent resistance.
- Greater temperature ranges.
- Increased operational smoothness.

These improvements **deliver longer syringe life**, and an improved cycle life of up to 400% over the Classic SGE Syringe.



Internal glass surface of SGE diamond syringe vs competitor syringe (magnified 20x).



Clarity

SGE Diamond Syringes for Autosamplers

The SGE Diamond Syringes for autosamplers and instruments incorporate a vibrant new color scheme distinguished by volume enabling easy identification of installed syringes.



Accuracy

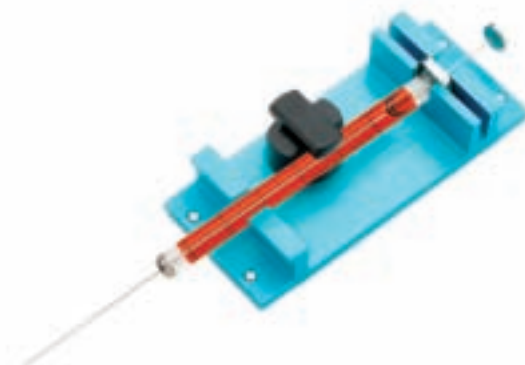
The SGE Diamond Syringe offers a new level of accuracy in the laboratory.

The SGE Diamond Syringes have been enhanced to eliminate areas where fluid can become trapped and potentially cause carry over. A closer fit between plunger tip and PTFE zero point, a tighter fit between the PTFE insert and glass barrel and an improved fixed needle attachment, all help to **reduce carry over** by ensuring the fluid is flushed out.

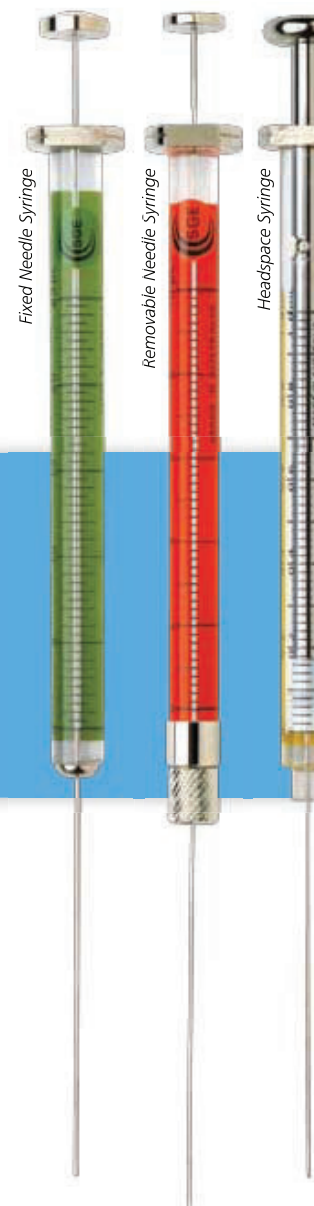
The SGE Diamond Syringe design enhancements have significantly reduced adhesive from the fluid path. This adds to the durability of the syringe and **reduces the risk of sample interaction** with the adhesive.



The needle and hub are permanently fused, greatly increasing the strength.



CTC Analytics



SGE's involvement in all areas of Chromatography provides a unique understanding of customers' requirements for optimum syringe design.

With over 40 years of syringe manufacturing experience, you can be sure that choosing SGE syringes will guarantee the results you need.

A broad range of syringes for CTC Analytics Instrument users with:

- Syringe capacities from 0.5 μ L to 5 mL.
- Fixed and removable needle versions.
- Several needle tip styles to suit your application requirements.

CTC instrument syringes feature:

- High temperature syringes for headspace application with temperatures up to 150 $^{\circ}$ C.
- PTFE plunger seal option for smooth, leak free operation - suitable for both liquid and gas samples, plungers are replaceable.
- Specifications of the syringes are matched to CTC holders to ensure proper fit and reliable functioning.

Specifications	
Accuracy and Reproducibility	$\pm 1\%$ (dispensed volume)
Borosilicate Glass Barrel Outer Diameter (OD)	10 μ L to 250 μ L = 6.5mm (except P/N 003715 and P/N 006720 = 8mm) 500 μ L = 8mm, 1 mL = 7.6mm, 2.5 mL = 9.7mm, 5ml = 14mm
Scale Length	10 μ L = 54.1mm, 25 μ L to 5mL = 60mm
International Standards Traceability	

Syringes for CTC Analytics HTS, HTC and LC PAL.

Needle Gauge	Needle OD (mm)	Needle Length (mm)	Needle Tip	Barrel OD (mm)	PTFE Plunger Seal	Description	Part Number	Pack Size	Replacement Needle	Replacement Plunger
10 μL Fixed Needle										
22	0.72	51	LC	6.5	-	10F-CTC-LC	002710	1	-	-
22	0.72	51	LC	6.5	✓	10F-CTC-GT-LC	002715	1	-	031803
25 μL Fixed Needle										
22	0.72	51	LC	7.6	✓	25F-CTC-GT-LC	003715	1	-	0318921
22	0.72	51	LC	6.5	-	25F-C/T-LC	003984	1	-	-
25 μL Removable Needle										
22	0.72	51	LC	6.5	✓	25R-C/T-GT-LC	003985	1	038250	031816
50 μL Fixed Needle										
22	0.72	51	LC	6.5	✓	50F-C/T-GT-LC	004810	1	-	031821
100 μL Fixed Needle										
22	0.72	51	LC	6.5	✓	100F-CTC-GT-LC	005715	1	-	0318261
22	0.72	51	LC	6.5	✓	100F-CTC-GT-LC (0.4)*	005720	1	-	0318924
100 μL Removable Needle										
22	0.72	51	LC	6.5	✓	100R-C/T-GT-LC	005330	1	038250	031826
250 μL Fixed Needle										
22	0.72	51	LC	8	✓	250F-CTC-GT-LC (0.4)*	006720	1	-	0318926
250 μL Removable Needle										
22	0.72	51	LC	6.5	✓	250R-C/T-GT-LC	006330	1	038250	031831
500 μL Fixed Needle										
22	0.72	51	LC	8	✓	500F-CTC-GT-LC (0.4)*	007720	1	-	0318928
1 mL Removable Needle										
22	0.72	51	LC	7.6	✓	1MR-CTC-GT-LC(0.41)*	008120	1	039180	0318444
2.5 mL Removable Needle										
22	0.72	51	LC	10.7	✓	2.5MR-CTC-GT-LC(0.41)*	008620	1	039182	0318454
5 mL Removable Needle										
22	0.72	51	LC	13.7	✓	5MR-CTC-GT-LC(0.41)*	008820	1	031525	0318564

*indicates wide bore needle



'Performance as Standard' at SGE:

- Borosilicate glass barrel for strength and inertness.
- Stainless steel needles for inertness, strength and corrosion resistance.
- Backing behind the scale aids quick and accurate reading of the syringe scale.
- Metal back flange provides stability and resists fracture.
- Metal needle cap on syringe barrel protects and improves syringe lifetime.
- Syringes are individually tested for quality ensuring reliability and conformance.
- Unique packaging design eliminates possible contamination in the syringe.