

PTFE Tip, Gas-Tight Syringes

- Suitable for gases or liquids.
- High accuracy of dispensed volumes.
- Interchangeable barrels, plungers, and tips extend performance and increase cost-effectiveness.

Hamilton

Volume	Needle Term.	Needle Gauge	Needle Length	Point Style	Hamilton		qty.	Restek cat.#
					Model	cat.#		
10 µL	N	26s	2"/51 mm	2	1701	80000	ea.	24557
10 µL	RN	26s	2"/51 mm	2	1701	80030	ea.	24558
25 µL	N	22s	2"/51 mm	2	1702	80200	ea.	24559
25 µL	RN	22s	2"/51 mm	2	1702	80230	ea.	24560
50 µL	N	22s	2"/51 mm	2	1705	80900	ea.	24561
50 µL	RN	22s	2"/51 mm	2	1705	80930	ea.	24562
100 µL	N	22s	2"/51 mm	2	1710	81000	ea.	24563
100 µL	RN	22s	2"/51 mm	2	1710	81030	ea.	24564
250 µL	N	22s	2"/51 mm	2	1725	81100	ea.	24567
250 µL	RN	22s	2"/51 mm	2	1725	81130	ea.	24568
500 µL	LTN	22	2"/51 mm	2	1750	81217	ea.	24571
500 µL	RN	22	2"/51 mm	2	1750	81230	ea.	24572
1 mL	LTN	22	2"/51 mm	2	1001	81317	ea.	24575
1 mL	RN	22	2"/51 mm	2	1001	81330	ea.	24576
1 mL	TLL	*		w/o slots	1001	81320	ea.	24578
2.5 mL	TLL	*		w/o slots	1002	81420	ea.	24584
2.5 mL	RN	22	2"/51 mm	2	1002	81430	ea.	24582
2.5 mL	N	22	2"/51 mm	2	1002	81417	ea.	24581
5 mL	TLL	*		w/o slots	1005	81520	ea.	20178
10 mL	TLL	*		w/o slots	1010	81620	ea.	20179
25 mL	TLL	*		w/o slots	1025	82520	ea.	24591
50 mL	TLL	*		w/o slots	1050	85020	ea.	24717
100 mL	TLL	*		w/o slots	1100	86020	ea.	24724

*Needles sold separately. See page 390.

SGE

Volume	Needle Term.	Needle Gauge	Needle Length	Point Style	SGE		qty.	Restek cat.#
					Model	cat.#		
10 µL	F	26	50 mm	2	10F-GT	002200	ea.	24725
10 µL	R	26	50 mm	2	10R-GT	002250	ea.	24726
25 µL	F	25	50 mm	2	25F-GT	003200	ea.	24727
25 µL	R	25	50 mm	2	25R-GT	003250	ea.	24728
50 µL	F	25	50 mm	2	50F-GT	004200	ea.	24729
50 µL	R	25	50 mm	2	50R-GT	004250	ea.	24730
100 µL	F	25	50 mm	2	100F-GT	005200	ea.	24734
100 µL	R	25	50 mm	2	100R-GT	005250	ea.	24735
100 µL	LL	*			100F-LL-GT	005230	ea.	24737
250 µL	F	25	50 mm	2	250F-GT	006200	ea.	24738
250 µL	R	25	50 mm	2	250R-GT	006250	ea.	24739
250 µL	LL	*			250F-LL-GT	006230	ea.	24741
500 µL	F	25	50 mm	2	500F-GT	007200	ea.	24742
500 µL	R	25	50 mm	2	500R-GT	007250	ea.	24743
1 mL	R	23	50 mm	2	1MR-GT	008100	ea.	24750
1 mL	LL	*			1MDF-LL-GT	008025	ea.	24752
2.5 mL	LL	*			2.5MDF-LL-GT	008425	ea.	24755
5 mL	LL	*			5MDR-LL-GT	008760	ea.	24757
10 mL	LL	*			10MDR-LL-GT	008960	ea.	24759
25 mL	LL	*			25MDR-LL-GT	009462	ea.	24760
50 mL	LL	*			50MR-LL-GT	009660	ea.	24761
100 mL	LL	*			100MR-LL-GT	009760	ea.	24762

*Needles sold separately. See page 390.



24558



24727



24761

PTFE Tip, Gas-Tight Syringe Replacement Needles

for Removable Needle Syringes

Materials: stainless steel needle, nickel-plated brass hub.

Hamilton

Syringe Volume	Needle Gauge	Needle Length	Point Style	Hamilton cat.#	qty.	Restek cat.#
5-100 µL	26s	2"	2	7758-02	6-pk.	24939
5-100 µL	22s	2"	2	7758-03	6-pk.	24940
250 µL-10 mL	22	2"	2	7779-01	6-pk.	24942
250 µL-10 mL	26s	2"	2	7779-02	6-pk.	24943
250 µL-10 mL	22s	2"	2	7779-03	6-pk.	24944

SGE

Syringe Volume	Needle Gauge	Needle Length	Point Style	SGE cat.#	qty.	Restek cat.#
5 µL	26	50 mm	2	036110	5-pk.	24802
10 µL	23	50 mm	2	037111	5-pk.	24804
10 µL	26	50 mm	2	037110	5-pk.	24803
25-500 µL	23	50 mm	2	038111	5-pk.	24806
25-500 µL	25	50 mm	2	038110	5-pk.	24805
1-2.5 mL	23	50 mm	2	039110	5-pk.	24807



Replacement Plunger Assembly, PTFE-Tipped

for Agilent 7670, 7671, and 7672 ALS Autosampler Syringes

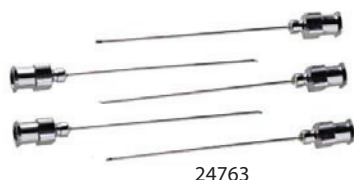
Hamilton

Syringe Volume	Needle Term.	Hamilton cat.#	qty.	Restek cat.#
10 µL	N, RN, LT/LTN	13205	ea.	24919

also available

Gas-Tight PTFE-Tipped Syringes for Agilent 7673, 7683, 7693A, and 6850 Autosamplers.

See [page 375](#).



Gas-Tight Syringe Replacement Needles for Luer Lock Syringes

Hamilton

Hub Material	Needle Gauge	Needle Length	Point Style	Hamilton cat.#	qty.	Restek cat.#
metal	26s	2"/51 mm	2	90053	6-pk.	20133
metal	25s	1.97"	3	90049*	6-pk.	24605
metal	22s	2"/51 mm	2	90051	6-pk.	24606
Kel-F (PTFE tip)	26s	2"/51 mm	2	90153	6-pk.	24607
Kel-F (PTFE tip)	25s	1.97"	3	90149*	6-pk.	24608
Kel-F (PTFE tip)	22s	2"/51 mm	2	90151	6-pk.	24609

*For Waters U6K injection valve.

SGE

Hub Material	Needle Gauge	Needle Length	Point Style	SGE cat.#	qty.	Restek cat.#
metal	23	50 mm	2	039802	5-pk.	24763
metal	18	50 mm	2	039842	5-pk.	24764
metal	22	2"/51 mm	3	039895**	2-pk.	24765

**For Rheodyne/Valco valves.

SGE Gas-Tight Syringes with Shut-off Valves

- Ideal for sample storage and transportation.
- Push-pull shut-off valve.

SGE

Syringe Fitted with Removable Needle and Valve

Volume	Model	SGE cat.#	qty.	Restek cat.#
50 µL	50R-V-GT	004279	ea.	24880
100 µL	100R-V-GT	005279	ea.	24881
250 µL	250R-V-GT	006279	ea.	24882
500 µL	500R-V-GT	007279	ea.	24883
1 mL	1MDR-V-GT	008110	ea.	24884
2.5 mL	2.5MDR-V-GT	008510	ea.	24885

SGE

Syringe Fitted with Luer Lock Valve*

Volume	Model	SGE cat.#	qty.	Restek cat.#
1 mL	1MR-VLL-GT	008160	ea.	24886
2.5 mL	2.5MDR-VLL-GT	008560	ea.	24887
5 mL	5MDR-VLLMA-GT	008770	ea.	24888
10 mL	10MDR-VLLMA-GT	008970	ea.	24889
25 mL	25MDR-VLLMA-GT	009472	ea.	24890
50 mL	50MR-VLLMA-GT	009670	ea.	24891
100 mL	100MR-VLLMA-GT	009770	ea.	24892

*Order needles separately.

Replacement Needles for Gas-Tight Syringes with Shut-off Valves

SGE

Model V Syringe Valve: fits any SGE removable needle syringe, 25 µL–2.5 mL

Syringe Volume	Needle Gauge	Needle Length	Point Style	Model	SGE cat.#	qty.	Restek cat.#
25 µL–2.5 mL	23	50 mm	Cone	V	031905	ea.	24898

SGE

Luer Lock Needles

Syringe Volume	Needle Gauge	Needle Length	Point Style	Model	SGE cat.#	qty.	Restek cat.#
1 mL–100 mL	23	50 mm	2	NLL-5/23	039802	5-pk.	24763
1 mL–100 mL	18	50 mm	2	NLL-5/18	039842	5-pk.	24764
1 mL–100 mL	22	2"/51 mm	3	NLL-LC**	039895	2-pk.	24765

**Fits Rheodyne & Valco injection valves.

Economical Hamilton Syringe Guide*

- Prevents syringe plunger from bending.
- Adjustable stop prevents plunger damage.
- Easily installed.
- Used with syringe series 700/1700/1000.

Syringe Volume	Hamilton cat.#	qty.	Restek cat.#
25–500 µL	14906	ea.	24615
5–10 µL	14806	ea.	24616

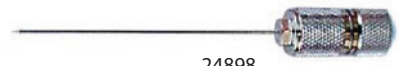
*Syringe not included.



24881



24887



24898



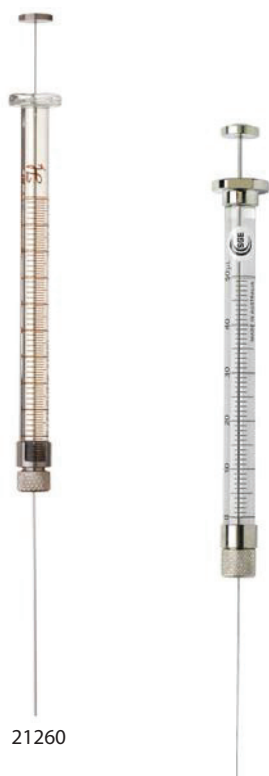
24763



24616

Gas-Tight Syringes

For complete loop-fill, the syringe capacity should be >2X the loop volume.



21260

24868

Gas-Tight Syringes for Rheodyne® & Valco® Valves

- PTFE-tipped plungers.
- Removable needles.
- Replaceable syringe barrels, plungers, and plunger tips.

Hamilton

Volume	Needle Term.	Needle Gauge	Needle Length	Point Style	Hamilton Model	Hamilton cat.#	qty.	Restek cat.#
10 µL	RN	26s	2"/51 mm	3	1701	80065	ea.	21260
25 µL	RN	22s	2"/51 mm	3	1702	80265	ea.	21261
50 µL	RN	22s	2"/51 mm	3	1705	80965	ea.	21262
100 µL	RN	22s	2"/51 mm	3	1710	81065	ea.	21263
250 µL	RN	22s	2"/51 mm	3	1725	81165	ea.	21264

SGE

Volume	Needle Term.	Needle Gauge	Needle Length	Point Style	SGE Model	SGE cat.#	qty.	Restek cat.#
10 µL	R	22	2"	3	10R-GT-LC	002313	ea.	24866
25 µL	R	22	2"	3	25R-GT-LC	003312	ea.	24867
50 µL	R	22	2"	3	50R-GT-LC	004312	ea.	24868
100 µL	R	22	2"	3	100R-GT-LC	005312	ea.	24869
250 µL	R	22	2"	3	250R-GT-LC	006312	ea.	24870
500 µL	R	22	2"	3	500R-GT-LC	007312	ea.	24871

Replacement Needles for Gas-Tight Syringes for Rheodyne® & Valco® Valves

Hamilton

Syringe Volume	Needle Gauge	Needle Length	Point Style	Hamilton cat.#	qty.	Restek cat.#
5-100 µL	22s	2"	3	7770-01	6-pk.	24941
250 µL-10 mL	22	2"	3	7780-04	6-pk.	24945

SGE

Syringe Volume	Needle Gauge	Needle Length	Point Style	SGE cat.#	qty.	Restek cat.#
10 µL	22	2"	3	037250	5-pk.	24808
25-500 µL	22	2"	3	038250	5-pk.	24809



24941



24808

Guide to Needle Termination Codes

Hamilton:

- (N) Cemented Needle
- (RN) Removable Needle
- (ASN) Autosampler Cemented Needle
- (ASRN) Autosampler Removable Needle
- (TLL) PTFE Luer Lock
- (KH) Knurled Hub
- (LT) Luer Tip
- (LTN) Luer Tip Cemented Needle

SGE:

- (F) Fixed Needle
- (R) Removable Needle
- (LL) Luer Lock
- (LT) Luer Tip

A-2 Luer Gas-Tight Syringes*

- For use with VOA-CYL 4 standards.
- Push-style on-off button valve.

Use to withdraw a gas sample from a high-pressure cylinder through a high-purity VOC single-stage regulator after attaching the appropriate adaptor (cat.# 21118) to the regulator. Use with luer syringe needles.



20162

High-purity VOC single-stage regulator is described on page 453 of the Air Sampling Products section.

Description	qty.	cat.#
100 µL Luer Syringe	ea.	20162
500 µL Luer Syringe	ea.	20163

*Restek's A-2 syringes have a luer tip.

Replacement Needles for A-2 Luer Gas-Tight Syringes

Description	Needle Gauge	Size	qty.	cat.#
Luer Syringe Needles for 100 µL A2 Gas-Tight Syringes	22	0.028" OD x 0.006" ID x 2"	3-pk.	22783
Luer Syringe Needles for 500 µL A2 Gas-Tight Syringes	22	0.028" OD x 0.012" ID x 2"	3-pk.	22784

Heavy Duty Purge & Trap Syringe Dynatech Precision Sampling

- Heavy-duty glass barrel with metal front and rear flanges.
- PTFE luer lock tip.
- Can fill and empty sparge tubes.
- Sample-Lok valve accepts standard luer lock needles.
- Suitable for purge & trap applications.



21208

Syringe	5 mL cat.#	10 mL cat.#
without Sample-Lok	21206	21209
with Sample-Lok	21208	21207

Luer Lock Valve Adaptors

Use a luer lock valve adaptor to connect a luer lock fitting to a Rheodyne® or Valco® valve.



21283

Description	SGE cat.#	qty.	Restek cat.#
Luer Lock Valve Adaptors	200010	2-pk.	21283

Jumbo Syringe

Clear acrylic syringes, ideal for holding and dispensing large volumes of gas. An adjustable plunger on the O-ring ensures that the syringe is gas-tight over a long period of time. The central port is supplied with a luer lock fitting; the secondary port is supplied with a septum nut. This enables access to the gas sample for adding standards or removing a subsample. The plunger stem is detachable, making sample storage easy.



21276

Volume	Model	SGE cat.#	qty.	Restek cat.#
500 ml	500MAR-LL-GT	009910	ea.	21275
1000 ml	1000MAR-LL-GT	009920	ea.	21276
2000 ml	2000MAR-LL-GT	009930	ea.	21277

Syringe O-Rings

Syringe Volume	SGE cat.#	qty.	Restek cat.#
500 mL	032527	ea.	21278
1,000 mL	032532	ea.	21279



21279

21278

Septa also available (cat.# 27127, page 223).