1 mL Syringe now available

eVol® XR - Every One an Expert

- Speed up and simplify laboratory workflow
- Improve accuracy and reproducibility
- Standardize results independent of operator skill

2010 R&D 100 Award Winner

SGE Analytical Science

www.sge.com

AUSTRALIA & PACIFIC REGION CHINA EUROPE JAPAN USA

eVol® is the world's first digital analytical syringe

eVol® is the coupling of two precision devices: a digitally controlled electronic drive and an XCHANGE® enabled analytical syringe.

- XCHANGE® syringes are easily and quickly changed allowing them to be dedicated to individual liquids or methods to prevent possible cross-contamination of reagents.
- eVol® is ergonomic, comfortable and easy to use.
- eVol® is easily calibrated and calibration factors saved for each syringe, enabling laboratories to comply with stringent global laboratory standards (e.g. GLP, GMP, FDA).
- eVol® is suitable for use with volatile samples.
- eVol® is programmable to store a laboratory workflow (up to 98 steps).
- eVol® is suitable for direct injection onto a chromatography column with a consistent flow rate.
- eVol®'s stainless steel needle enables direct injection through septa.
- Password protection options enabling standardization of work processes
- Variable speed of operation

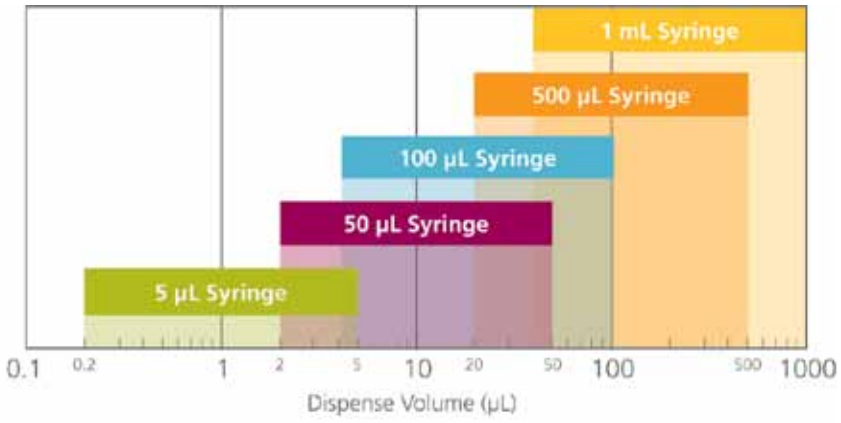
eVol® applications

Applications for eVol® include:

- Preparation of calibration standards
- Preparation and addition of internal standards
- Precise dispensing of aqueous and non-aqueous liquids
- Routine dispensing
- Ergonomic operation with substances in a fume hood
- Sample dilution
- Instrument (GC and LC) injections
- Eliminating the need for Serial dilutions
- Micro titrations
- TLC spotting
- FDA methods requiring a 1 mL syringe

New 1 mL Syringe expands applications for eVol®

Volume range of eVol® XCHANGE® syringes



The award winning eVol® improves the pace of laboratory processes while delivering improved accuracy and reproducibility.

The table below includes examples of how eVol® improves standard laboratory processes

PROCESS	Without eVol®	With eVol®	eVol® BENEFIT
Standard Preparation	Standards prepared in a large volume flask. From this standard aliquots are individually dispensed into autosampler vials.	Standards are made up directly in the vial, including the make up solvent.	• Less glassware usage • Reduces waste fluid • Significant time saving • Improved accuracy and reproducibility
Addition of Standards	Small amounts of standard aspirated and dispensed into all samples before being transferred to an autosampler vial.	One aspiration and a fast series of repeated accurate dispenses directly into vials.	• Significant time saving • Improved accuracy and reproducibility
Delivery of derivatization agents	Laboratory staff required to work in a fume hood with potentially hazardous materials, to prepare combinations of derivatization agents in open vials.	Process completed with eVol® programmed to aspirate an amount of solvent or agent and then dispense aliquots into sealed vials, Single handed operation.	• Improved operator safety, lower spill and splash risk • Ergonomic benefits behind fume hood screen • Improved accuracy and reproducibility • Less glassware use
Serial dilutions	Transfer of a small amount of solution to another container. Solvent added to achieve the required volume. This is repeated multiple times to obtain the required final accurate concentration.	One aspiration of the solution can be dispensed directly into the solvent to achieve the required accurate concentration.	• Complete workflow simplification • Significant time savings • Improved accuracy • Less solvent required • Less glassware used

eVol® NMR Edition

eVol® NMR Edition features long stainless steel needles enable 'in tube' sample dilution and mixing, and recovery of samples facilitating re-use of NMR tubes. Contact SGE for details.

eVol® MEPS™

The eVol® custom programming function enables MEPS™ (micro SPE) to be semi-automated and proofed before transition to fully automated platforms. Ask SGE for more information on how eVol® MEPS™ can improve your method development.

eVol® XR Digitally Controlled Syringe - Starter Kit

Description	Part No.
eVol® XR Syringe Starter Kit Contains: • eVol® XR Electronic Syringe • 3 eVol® Syringes – 5 µL, 100 µL and 1 mL • Stand • Universal Charger • Comprehensive Instruction Manual • Disc with Manual in Multiple Languages	2910200
eVol® NMR Edition Contains: • eVol® Electronic Syringe • 3 eVol® Syringes – 5 µL syringe is supplied with a 115 mm needle, 50 µL and 500 µL syringes are supplied with both 115 and 180 mm needles • Stand. • Universal Charger • Comprehensive Instruction Manual • Disc with Manual in Multiple Languages	2910100
eVol® Electronic Syringe (handle only)	2910005

eVol® XCHANGE® and eVol® MEPS™ Syringes

Description	Needle Length (mm)	Needle Gauge	Needle OD (mm)	Needle ID (mm)	Needle Tip	Replacement Needle Part No.	Replacement Plunger Part No.	Syringe 3 Pack Part No.	Syringe Part No.
5 µL	50	25	0.5	0.12	Bevel	036910	2910380	2910320	2910020
5 µL (supplied without needle)	–	–	–	–	–	–	2910380	-	2910021
50 µL	50	25	0.5	0.2	Bevel	038110ᵛ	2910382	2910322	2910022
50 µL (supplied without needle)	–	–	–	–	–	–	2910382	-	2910023
50 µL for MEPS™ applications*	–	–	–	–	–	–	2910382	-	2910027
100 µL	50	25	0.5	0.2	Bevel	038110	2910383	2910329	2910029
100 µL for MEPS™ applications*	–	–	–	–	–	–	2910383	–	2910028
500 µL	50	23	0.63	0.32	Bevel	039110^	2910384	2910324	2910024
500 µL (supplied without needle)	–	–	–	–	–	–	2910384	-	2910025
500 µL for MEPS™ applications*	–	–	–	–	–	–	2910384	-	2910026
1 mL#	50	23	0.63	0.32	Bevel	039110	2910385	2910335	2910035

*# 1 mL syringe can only be used with eVol® XR, not compatible with eVol® Classic. ᵛ All SGE 25 – 500 µL replacement needles can be used with 50 µL and 100 µL eVol® syringes. ^ All SGE 1 – 2.5 mL replacement needles can be used with 500 µL eVol® syringes. * The eVol® MEPS™ syringes can be used with the range of MEPS™ BINs.*

Accessories for eVol® XR

Part No. 2910010
eVol® Stand

Part No. 2910012
eVol® Universal Charger

Part No. 2910040
eVol® Replacement Battery

Part No. 2910030
eVol® Charging Stand

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