



# eVol<sup>®</sup> N M R Edition - Every One an expert

## The world's first electronic syringe for NMR capillaries

- Improve results.
- Save time.
- Save money.



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# Introducing the new eVol® NMR Edition

IMPROVE RESULTS • SAVE TIME • SAVE MONEY

eVol® NMR Edition has been designed for the specific needs of NMR:



- Small sample quantities
- Requirement for very high levels of accuracy and reproducibility
- High cost of consumables
- Specialist samples and solvents

## Every One an Expert

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

The result is a digitally controlled positive displacement dispensing system that can be programmed to reproducibly and accurately perform a wide variety of liquid handling procedures.

*The new eVol® NMR Edition will improve your results and deliver time and cost savings.*

## eVol® enables Precise, Intuitive, Operator-independent Dispensing

- The programmable digital drive means liquid handling procedures are operator-independent, allowing more efficient workflow scheduling and a reduction in the re-analysis of incorrectly processed or false positive samples.
- XCHANGE® analytical syringes are easily and quickly changed allowing them to be dedicated to individual liquids, and methods, to prevent possible cross-contamination of reagents.
- Unlike air-displacement devices, eVol® is the perfect solution for accurately aspirating and dispensing both aqueous and non-aqueous liquids.
- eVol® features a familiar touch wheel operator interface and a full-color screen. The clever menu allows all the functions to be accessed logically and quickly. The programming functions are intuitive and include help screens and prompts.
- eVol® is ergonomic, comfortable, and intuitive to operate.



## World's First Operator Calibrated Analytical Syringe

- To comply with stringent laboratory standards (e.g. GLP, GMP, FDA) eVol® can be easily calibrated to ensure accurate dispensing at all times. The gravimetric calibration procedure is simple and can be performed at operator defined intervals.
- Calibration factors can be stored for up to ten XCHANGE® syringes and can be quickly loaded when the syringe is changed.

## eVol® and NMR

eVol® NMR Edition allows accurate manipulation of small volumes of NMR samples enabling dilution directly in the analysis tube – even in tubes with the smallest internal diameters.

eVol® facilitates in-tube sample mixing and enables recovery of precious samples allowing them to be stored in alternative vessels (such as inexpensive vials) rather than being left in valuable tubes. These tubes can now be emptied using eVol®, for washing and re-use.



**eVol®**  
2010 R&D 100  
Award Winner

## NMR laboratory experience with eVol®

eVol® is being used at France's Laboratoire de Résonance Magnétique Nucléaire, Institut de Biologie Structurale (LRMN, IBS) with positive results.

During method development the laboratory tests a large number of samples with high repetition. The screening procedures use very small sample volumes and involve titration of samples directly in NMR tubes. The laboratory has been impressed with eVol® which has provided improved accuracy and decreased sample handling time.

*"We use eVol® for the preparation of multiple low-volume NMR tubes in parallel. eVol® is reliable, accurate and practical for titrations and filling tubes with small diameters. eVol® is easy and fast to use and dispenses samples accurately." Jérôme Boisbouvier - LRMN, IBS, Grenoble, France.*

### eVol® benefits in NMR

- Facilitates small volume manipulation
- Operator independent accuracy, precision and reliability
- Increased speed of sample processing

## IMPROVE RESULTS • SAVE TIME • SAVE MONEY

The eVol<sup>®</sup> NMR kit (part number 2910100) contains the following:

- eVol<sup>®</sup> – Automated Analytical Syringe
- Manual, Quick-Start Guide & Support CD
- Multi-Country Charger
- Storage Stand
- 5 µL eVol<sup>®</sup> XCHANGE<sup>®</sup> syringe with 11.5 cm needle
- 50 µL eVol<sup>®</sup> XCHANGE<sup>®</sup> syringe with 11.5 cm and 18 cm needles
- 500 µL eVol<sup>®</sup> XCHANGE<sup>®</sup> syringe with 11.5 cm and 18 cm needles



### Replacement Needles (as supplied with kit)

Description	Needle Length (mm)	Needle Gauge	Needle OD (mm)	Needle Tip	Pack Size	Part Number
5 µL	115	25	0.5	Bevel	2	036920
50 µL	115	23	0.63	Bevel	5	038161
50 µL	180	23	0.63	Bevel	2	038138
500 µL	115	23	0.63	Bevel	5	039160
500 µL	180	23	0.63	Bevel	2	039138

### Alternative Replacement Needles

Description	Needle Length (mm)	Needle Gauge	Needle OD (mm)	Needle Tip	Pack Size	Part Number
5 µL	115	25	0.5	Cone	2	036922
50 µL	115	25	0.5	Cone	2	038060
50 µL	180	23	0.63	Cone	2	038038
500 µL	115	23	0.63	Cone	5	039060
500 µL	180	23	0.63	Cone	2	039038

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