

SYRINGE USE, CARE AND MAINTENANCE INSTRUCTIONS

500 nL to 5 µL NanoVolume Syringes

Congratulations on your new SGE Analytical Science NanoVolume Syringe. This syringe may look different to previous syringes. In addition to some visual changes, several enhancements have been engineered into the design and manufacture of this syringe. Thorough testing has proven that this syringe will provide an enhanced user experience over previous designs.

Key benefits of SGE Analytical Science syringes are:

- Longer Life
- Superior Performance and Robustness
- Reduced Carryover

The plungers in SGE Analytical Science NanoVolume Syringes extend to the needle tip. The nanolitre sized sample is contained only in the needle – there is no contact of the sample with the syringe barrel.

This syringe is a precision instrument, in order to maintain optimum performance and long life, a few simple care issues should be considered.

Syringe Specifications

- Temperature: Maximum 70 °C
- Accuracy and Reproducibility: $\pm 2\%$ of displaced volume



WARNING

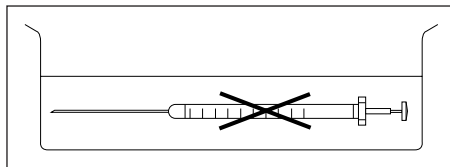
Always loosen the cover nut before removing or inserting plunger. Never tighten cover nut unless plunger is fully inserted.

Syringe Use

- Always inspect the syringe before use. Check the barrel for cracks and the needle tip for burrs.
- To ensure accuracy, the smallest volume injected from any syringe should be no less than 10 % of its total capacity.
- To eliminate carryover between samples, flush the syringe with solvent 5-20 times, remembering to discard the first 2-3 washes.

Syringe Cleaning

- Syringe cleaning agents will usually depend on the contaminating material. Methanol, methylene chloride, acetonitrile and acetone are commonly used solvents for cleaning.
- After the syringe has been cleaned, rinse the syringe with acetone.
- Clean externally by wiping with a tissue.
- Do not immerse the entire syringe in solvent as this may damage the adhesive used to bond parts of the syringe.



Needle and Plunger Care

- Check the needle for burrs prior to use. Use a fine emery board or carborundum to remove burrs.
- The needle and plunger in this syringe are a matched set. Ensure both the needle and plunger are changed if replacement is required.
- Always loosen the cover nut before removing or inserting the plunger.
- Avoid unnecessary movement of the plunger when the syringe is dry.
- Never force the plunger.
- Wipe plunger with a lint free tissue before replacing into the syringe. Be careful not to bend the plunger.
- Never tighten cover nut unless plunger is fully inserted.
- When replacing the plunger and needle refer to instructions supplied with Replacement Plunger and Needle Kit.
- For information about the range of Replacement Plunger and Needle Kits see www.sge.com

Syringe Storage

- To protect against breakage store the syringe in its original packaging or on a syringe rack.
- Always thoroughly clean the syringe before storage.

NOTE

DO NOT return any syringe to SGE unless requested to do so by an authorized SGE representative.

DO NOT return any syringe that has been used with radioactive, infectious or hazardous materials.

Any syringe being returned must be clearly marked with a Return Authorization Number, which is available from your SGE representative.

WARRANTY

All SGE syringes are warranted to meet the stated quality and performance specifications and to be free of defects in material or workmanship. The warranty implies free replacement of a defective syringe only upon proper written proof of the defect and if requested by SGE, the return of the defective product in its original packaging. It does not apply to mishandling of product by the customer, either in storage or use.

Syringe Conformance Certificate

This syringe has been manufactured using measuring equipment traceable to International Standards. SGE Analytical Science ensures that the displacement volume is within the conformance specifications. For applications requiring individual syringe calibration, SGE Analytical Science offers a factory calibration service. Contact your nearest SGE Analytical Science office or dealer for details.

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