

# Instructions for syringe use, care and maintenance 500 nL to 5 µL NanoVolume syringes

## Introduction

This syringe has been engineered and proven to provide the best possible user experience.

Key benefits of SGE syringes are:

- Longer life
- Superior performance and robustness
- · Reduced carryover

The plungers in 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.

In order to maintain optimum performance and long life, a few simple care issues should be considered.

## Important

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

## **Specifications**

- Temperature: Maximum 70°C
- Accuracy and reproducibility: ± 2 % of displaced volume at full scale.

## Instructions

- 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.

#### Clean and care

- 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".

## Storage

- To protect against breakage store the syringe in its original packaging or on a syringe rack.
- Always thoroughly clean the syringe and ensure that it is dry before storage.

## Warranty

All Trajan Scientific and Medical 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 Trajan Scientific and Medical 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.

- Do not return any syringe that has been used with radioactive, infectious or hazardous materials.
- Do not return any syringe unless requested to do so by an authorized Trajan representative.
- Any syringe being returned must be clearly marked with a return authorization number, which is available from your Trajan representative.

### Conformance statement

Trajan syringes are manufactured under a documented Quality Management System. All in-process measuring equipment and instrumentation is maintained and calibrated in accordance with stringent quality standards. Trajan warrants syringe displacement within the stated conformity specifications.

## Information and support

Visit www.trajanscimed.com or contact techsupport@trajanscimed.com

Specifications are subject to change without notice.

Analytical syringes manufactured by Trajan Scientific and Medical are intended for analytical and laboratory use only and are not intended or approved for use with food, including the production or packaging of food, nor medical or human in-vivo use.

