



LIQUID HANDLING TECHNOLOGY

Why TipOne®?

A success story for the universal pipette tip system

TipOne®

Passionate for Science.



www.starlabgroup.com

Why TipOne® Pipette Tips?

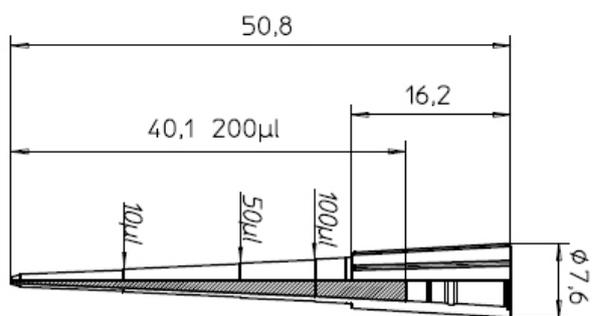


TipOne®

More complicated than you think

You might think that the production of a pipette tip is a simple matter. She is so small, somewhat inconspicuous and also made of plastic. Far from it! At STARLAB in this little thing a lot of know-how and passion is incorporated!

Why? The quality of a pipette tip is the main prerequisite for an accurate analytical result! Within the analytic chain she is used during a variety of working steps. It starts with sampling and ends with the final measurement for the determination of the substance. Failure can easily accumulate and influence the analytical result in a negative way.

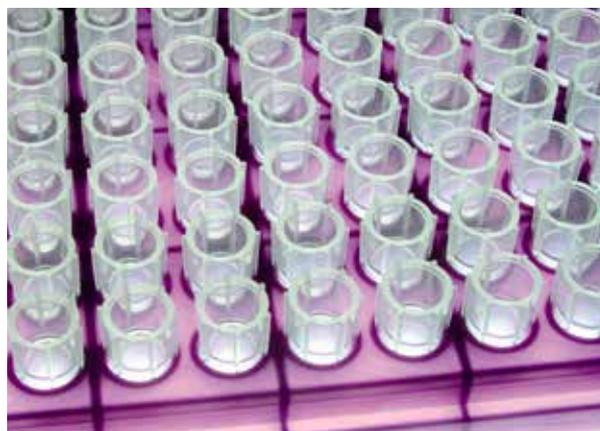


The final construction drawing documents the completed product design process. The slightest deviation from the normal value have a decisive influence on the tip fit. Therefore STARLAB tips are produced with extreme precision - tips that you can rely on.

Product Design

Our product specialists wonder very intensive about how an optimum tip must look like. Appearance is not synonymous with „beauty“. It is about issues concerning the optimal shape, length and color of the tip, of the right material or wall thickness. Fits the tip perfectly your pipette? Does the tip sits safely and easily accessible in the tip rack? Does the tip withstand very high mechanical stresses, even autoclaving?

Current market trends are monitored, suggestions by our customers were considered. After many meetings and votes all product requirements are defined. It comes to the actual design, now using CAD (Computer Aided Design).



Perfect Symmetry: TipOne® in the robust refill wafer.

STARLAB Quality

Trust is good – Certification is better!



As an ISO 9001, ISO 14001 and ISO 13485 certified company, working procedures and processes at STARLAB are checked and audited regularly. Additionally the quality of products is continuously monitored.



TipOne® Production & Quality



The injection moulding

The tip production at STARLAB begins with the development of a multiply occupied injection mold. The precision of the tool is critical to the quality of the later tip.

How many „nests“ (= tips) are made, for example, parallel? How high are the demands on surface quality? What is the flow behavior of the polymer to be processed within the tool? Much expertise is needed to produce accurate and precisely shaped tips at the end.

The cost and quality of injection molds and machines vary considerably. STARLAB invested heavily in the purchase and regular maintenance of high-performance machines and tools. Your advantage - the tip geometry of TipOne® is manufactured to a consistently high quality and the surface is extremely smooth.

Smooth, flat surfaces lead to a significantly improved sample yield and precision. Up to 160 tonnes clamping force during the molding process, producing not only high quality tips, but result in long-term use also to considerable wear of the tool.

Especially here, there are vendor-specific differences and often offer seemingly cheap provider with old technology and the associated loss of quality an inadequate tip quality.



Fully automated tip production with downstream packaging.

The source material - Polypropylene

Abbreviated PP, is a thermoplastic that is part of the group of polyolefins. Because of its high temperature and chemical resistance, the ideal material for the production of pipette tips.

STARLAB uses for the production of TipOne® only highly pure PP granules to exclude from the very beginning of the production chain contamination with foreign components, such as metal traces.



Perfect fit! TipOne® tips fit securely on your pipette - the guarantee for precise pipetting.

TipOne® Production & Quality

Intolerant of tolerance

Imagine, you are using a pipette series consisting of 96 pipette tip racks, but the tip geometry and the fit is different from tip to tip. Time and again we hear from our customers that manufacturers produce curved tips or those that do not fit properly on the used pipette. This will not happen with TipOne® pipette tips! STARLAB guarantees the lowest manufacturing tolerances within and between different batches. These factors are crucial especially when performing serial examinations needing reproducible results.

The production environment

Pipette tips must meet two main criteria. An exact shape and absolute purity. Preventive measures to protect all of the critical production areas from contamination:

- ▶ Consistant cleanliness in all areas of production
- ▶ Special work clothes
- ▶ Manufacturing process in clean room

TipOne® Specification

All TipOne® pipette tips are certified free of detectable RNase, DNase, DNA, and pyrogens. In addition TipOne® filter tips are sterile by default. In the context of manufacturing raw materials are sourced from certified and validated suppliers only.

„The bitterness of poor quality remains long after the sweetness of low price is forgotten.“

Edmund Bühler

All raw materials undergo inspection of incoming goods. The supplier's documentation and certificates of analysis are critically reviewed. After successful testing and release the raw materials can be used for production.



The finished product is certified with regard to the parameters of RNase, DNase, DNA and pyrogens. An independent testing institute monitors at set intervals each parameter. In addition, an internal self-control is done in regard to the tip geometry as well as the proper and complete assembly of packaging.



Top-Precision Series. TipOne® using ErgoOne multichannel pipette. Fatigue-free! The exact fit leads to a reduction of forces necessary for tip loading and ejection.

A System with a System!

One System, One Solution!

The TipOne® system is reusable, refillable and recyclable and every part of the system is interchangeable with the rest.

Compact, durable and green design

TipOne® is designed to be a green system. Our refill design reduces the amount of raw materials needed for its manufacture, resulting not only in less consumption of resources, but also the lowering of CO₂ emissions during production and transportation. Not only is this more environmentally-friendly, its compact design also helps save valuable storage space in your lab. The remarkable durability of our racks means they can be reused with the refill again and again, even if autoclaving, without any loss to their stability

or shape. All components of the TipOne® system are made from pure polypropylene (PP) for easy recycling where no separation of materials is required.



Intelligent quality

For us, providing you, the user, with all the information you need while you are pipetting at the bench is "Intelligent Quality". Our tip wafer contains all the useful information on the tips that it holds.

Clever

A 2D matrix code on each wafer allows full traceability of item and lot number, which is ideal for labs using Laboratory Information Management Systems (LIMS).

Experience tells us that our racks are refilled many times and having this information on the wafer avoids errors when racks are refilled with a different type or volume of tip.

Colour coded wafers for easy volume identification

Colour-coded wafers provide fast and easy volume identification at a glance

Simple!

The system comprises **two racks only**: one small, one large. Small rack for use with tip volumes 10 µl to 300 µl; large rack for use with tip volumes 1000 µl and 1250 µl.

Using our refills and reusing our racks could not be easier.

System Components Overview



TipOne® Product Portfolio



Try TipOne®!

Heavy is the head that wears the crown. Our “Try before you buy” sample service allows you to test our tips before any financial commitment. Send your request to: info@starlab.de



Diversity

The demands on pipette tips have increased dramatically in recent decades. It all started with yellow and blue tips, there are now a variety of tip geometries and designs.

TipOne® Standard Tips

Money well spent! Precisely shaped tips with extremely smooth and homogeneous surfaces - for precise, reproducible run-out behavior.

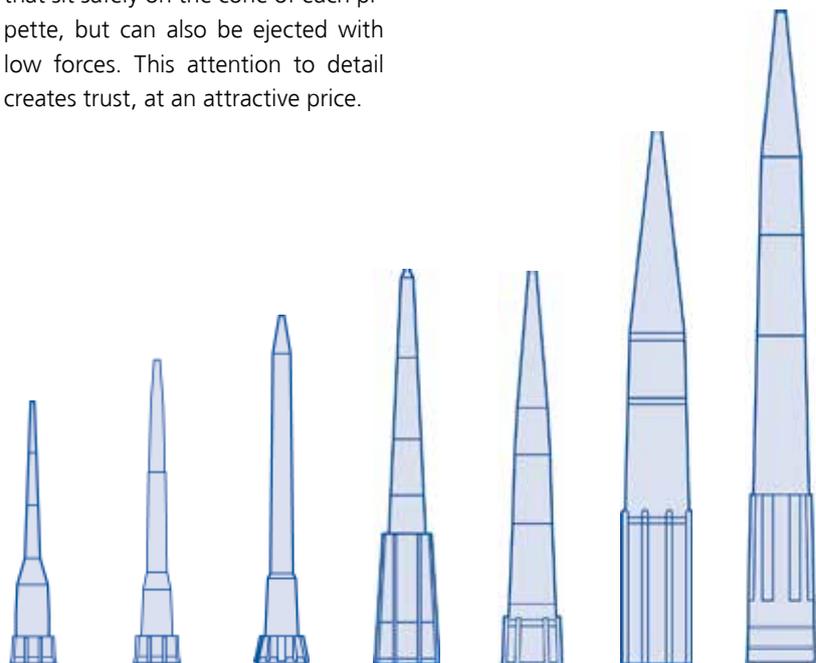
The cone geometry is the heart of each tip. It determines the optimal fit on your pipette. With a lot of detailed knowledge, we design tips that sit safely on the cone of each pipette, but can also be ejected with low forces. This attention to detail creates trust, at an attractive price.

TipOne® Features:

- ▶ Coaxial, very straight tips
- ▶ Extremely smooth and homogeneous surfaces
- ▶ Cone fits all standard pipettes
- ▶ Available in many colors and shapes
- ▶ RNase, DNase, DNA & Pyrogen free



Extra long XL tips for better accessibility of narrow sample tubes, filter tips for the most demanding tasks in molecular biology or surface-enhanced tips for critical viscous media - TipOne® fits all!



Diversity! A small selection of different TipOne® tip geometries.

TipOne® Filter Tips

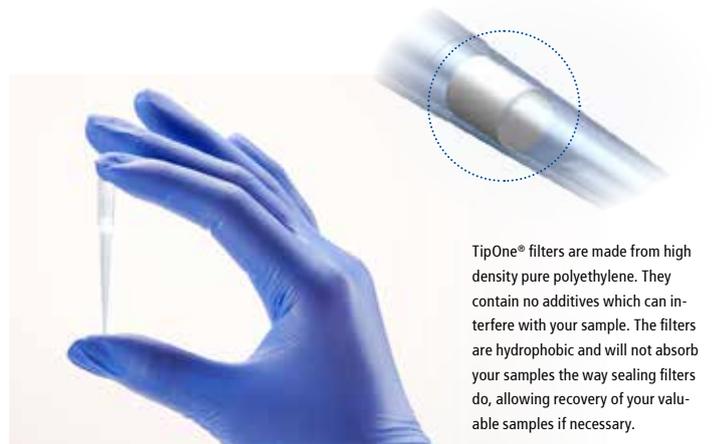
Nothing goes through!

Protect your samples against unwanted contamination by using TipOne® filter tips. During pipetting, it is not possible to see with the eye if fine aerosols are going into your pipette. If they are, those aerosols can contaminate other samples at a later date. The TipOne® filter protects against aerosol cross-contamination without trapping your valuable samples.

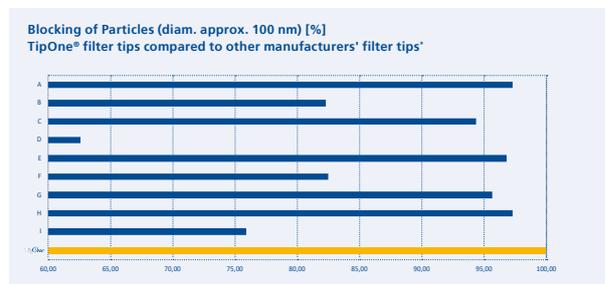
TipOne® filter tips contain no additives to interfere with your samples and are one of the best filters available on the market. They are proven* to block >99% of aerosols. The results, shown below, speak for themselves!

Filter Tip features

- ▶ Highly effective HDPE filter
- ▶ Filter contains no additives to interfere with your samples
- ▶ The filter will not absorb samples, allowing recovery if necessary
- ▶ Sterile, and RNase, DNase, DNA and Pyrogen free



TipOne® filters are made from high density pure polyethylene. They contain no additives which can interfere with your sample. The filters are hydrophobic and will not absorb your samples the way sealing filters do, allowing recovery of your valuable samples if necessary.



* The comparative tests were conducted in 2018 in an independent test institute with filter tips from other leading manufacturers.

TipOne® RPT

RPT: A technical breakthrough!

STARLAB's Repel Polymer Technology (RPT) optimises conventional polypropylene surfaces to improve the flow of 'sticky' liquids.

STARLAB's TipOne® RPT tips have no coating to interfere with your sample and offer an extremely hydrophobic surface.

All TipOne® RPT tips are certified RNase, DNase, DNA and Pyrogen free.

TipOne® tips are designed to fit all popular pipettes without any loss of accuracy or precision. TipOne® RPT tips are supplied in the same style packaging as other TipOne® tips. Therefore, the RPT refills and filter refills can be used in the racks from all other TipOne® tips, and vice versa!



TipOne® RPT with green food dye

Leading manufacturer's low retention tip with green food dye

RPT Tip Features

- ▶ No coating! Made from 100% pure polypropylene
- ▶ Improved sample recovery
- ▶ Reduced DNA binding
- ▶ Autoclavable
- ▶ Universal! Fits all popular pipettes
- ▶ Reusable, refillable and recyclable system



10 good reasons for TipOne® pipette tips

1. The latest injection molding technology in production
2. Consistent quality from batch to batch
3. RNase, DNase, DNA & Pyrogen free
4. Precisely shaped tip geometry, suitable for all standard pipettes
5. Fatigue-free - by low take up and ejection forces
6. Smooth and flat tip surface for significantly higher sample yield and precision
7. A convincing environmentally friendly system - reusable, refillable and recyclable
8. Large Tip Selection - standard tips, filter tips and surface-enhanced TipOne® RPT tips
9. TipOne® filter tips with a proven aerosol blockade of > 99%
10. Attractive price!



www.starlabgroup.com

STARLAB International GmbH

Neuer Hölftigbaum 38
22143 Hamburg
Germany

T: +49 (0)40 675 99 39 0
F: +49 (0)40 675 99 39 20

info@starlab.de
www.starlabgroup.com

STARLAB GmbH

Neuer Hölftigbaum 38
22143 Hamburg
Germany

T: +49 (0)40 675 99 39 0
F: +49 (0)40 675 99 39 20

info@starlab.de
www.starlab.de

STARLAB (UK), Ltd

5 Tanners Drive
Milton Keynes MK14 5BU
United Kingdom

T: +44 (0)1908 283800
F: +44 (0)1908 283802

infoline@starlab.co.uk
www.starlab.co.uk

STARLAB FRANCE SARL

30 Rue Jean Rostand
91400 Orsay
France

T: +33 (0)1 60 1371 70
F: +33 (0)1 69 4148 65

info@starlab.fr
www.starlab.fr

STARLAB S.r.l.

Via Pinturicchio 1
20133 Milano
Italy

T: +39 (0)2 7020 1040
F: +39 (0)2 7020 1033

info@starlab.it
www.starlab.it