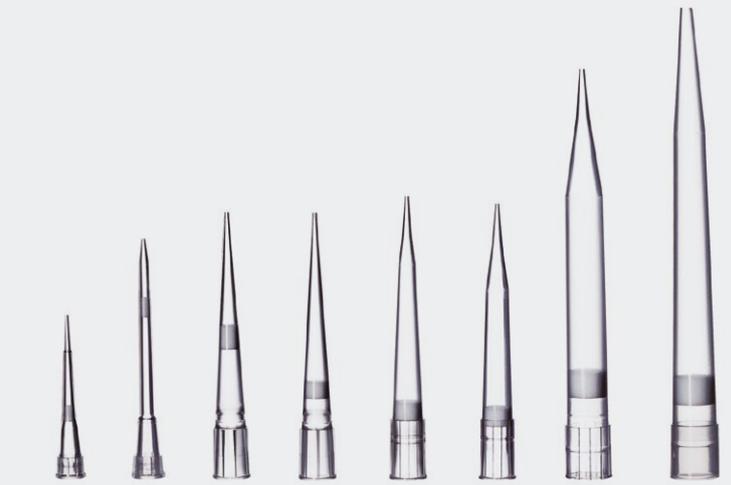


# Safetyspace™ Filter Tips

Filter Tip to Protect  
from Contamination

## Product Information

Filter tips are an efficient way to avoid cross-contamination of your sample and/or pipette and reduce the need for pipette maintenance. Sartorius Safetyspace™ Filter Tips have more space between the sample and the filter than conventional filter tips, which prevents the risk of the sample being absorbed into the filter. Safetyspace™ Filter Tips are ideal for use with Sartorius pipettes, enabling maximum accuracy and precision.



## Description

Safetyspace™ Filter Tips are made of virgin polypropylene and the filter of polyethylene without any self-sealing additives to avoid contamination of the sample, which may affect the results. All the steps in the manufacturing process strictly follow ISO 9001 and ISO 13485 quality standards, and the tips are manufactured in ISO 8-classified cleanroom conditions to avoid any contamination. Every production batch of Safetyspace™ Filter Tips is tested for DNase, RNase, human DNA and endotoxins. The tips are released for sale once they have fulfilled the test requirements. Certificates are available at [www.sartorius.com](http://www.sartorius.com).

The additional space between the sample and the filter differentiates Safetyspace™ Filter Tips from other filter tips. This feature is particularly useful in reverse pipetting, pipetting foaming liquids (such as buffers and proteins), or when using Multi-Dispensing mode in electronic pipette.

## Features

- Available in volumes from 10 to 5,000 µL
- All production batches certified DNase, RNase, human DNA and endotoxin free
- Informative rack labels indicating tip volume, product number, lot number, date, and purity level for improved tip identification and traceability
- All Safetyspace™ Filter Tips are E-beam pre-sterilized
- Perfect fitting and sealing with all Sartorius pipettes
- Smooth and ergonomic tip attachment and ejection ensured by compatibility with the spring-loaded Optiload mechanism of Sartorius pipettes
- Color-coded tip trays make it easy to match tip with appropriate Sartorius pipette
- Available in Single Tray flip-top racks that are easy to open and close with one hand
- Materials used in tips, trays, and racks are 100% recyclable or can be incinerated as energy waste

Safetyspace™ Filter Tips are also available as Low Retention tips. The Sartorius tip offering also includes Optifit non-filtered tips and Optifit Low Retention non-filtered tips (see catalog for details).

## Applications

- Molecular biology
- Microbiology
- Cell culture applications
- Radioactive work
- Any application where preventing cross-contamination is vital

## Intended Use

The Sartorius Safetyspace™ Filter Tips are intended, designed and manufactured to be used in liquid dispensing in a variety of applications and to be used in combination with Sartorius pipettes.

It is recommended that Safetyspace™ Filter Tips are used with Sartorius pipettes to ensure optimum compatibility and performance.

# Technical Data

## Technical Specifications\*

<b>Sterilization</b>	Electron beam (beta irradiation) in accordance with EN 552 and ISO 11137 and validated by using 25 kGy as the minimum dose with SAL (sterility assurance level) of $10^{-6}$ .
<b>Purity certificate</b>	Every production batch (lot number) of tips is certified free of DNase, RNase, human DNA and endotoxins.
<b>Endotoxin purity testing</b>	Validated test result with Chromogenic kinetic method according to Ph.Eur. 2.6.14, Method D for endotoxin free pipette tip is $< 0.005$ IU/mL (EU/mL).
<b>DNase purity testing</b>	DNase-free pipette tips show no evidence of DNase activity in the fluorometric assay with the detection level of $< 6.25 \times 10^{-5}$ U/ $\mu$ L when DNase I is used as a standard.
<b>RNase purity testing</b>	RNase-free pipette tips show no evidence of RNase activity in the fluorometric assay with the detection level of $< 3.125 \times 10^{-9}$ U/ $\mu$ L when RNase A is used as a standard.
<b>Human DNA purity testing</b>	Human DNA free pipette tips show no evidence of human DNA in quantitative PCR (qPCR) using human DNA specific primers and with a detection level of $< 1$ pg/ $\mu$ L.
<b>Standards</b>	ISO 9001 Quality management standard ISO 14001 Environmental standard ISO 13485 Medical device quality management standard ISO 14644-1 Class 8 cleanroom manufacturing standard
<b>Autoclavability</b>	No
<b>Transportation conditions</b>	Temperature: $-50^{\circ}\text{C}$ to $+50^{\circ}\text{C}$ Humidity: 10% - 90% Shocks: $< 10$ G
<b>Storage conditions</b>	Temperature: $-20^{\circ}\text{C}$ to $+40^{\circ}\text{C}$ Humidity: 10% - 60%
<b>Filter pore size</b>	20 - 40 $\mu\text{m}$
<b>Expiry date</b>	5 years from manufacturing date*

\* Extended filter tip sterility assurance level, DNase, RNase, human DNA and endotoxin testing detection limits may differ from values reported here. Please request a batch specific certificate from [lhinfo.finland@sartorius.com](mailto:lhinfo.finland@sartorius.com)

## Materials and Recyclability

<b>Tip</b>	<b>Polypropylene (PP)</b> Recyclable, can be incinerated as energy waste
<b>Polyethylene (PE)</b>	Polyethylene (PE) Recyclable, can be incinerated as energy waste
<b>Tray and Rack</b>	Polypropylene (PP) Recyclable, can be incinerated as energy waste
<b>Cardboard package</b>	Cardboard Recyclable, renewable waste

## Package Options



Single Tray racks  
purity-certified tip racks

# Ordering Information

## Safetyspace™ Filter Tips

Order Code	Volume Range [µL]	Length [mm]	Package	Purity Level	Tips/Unit
				Certified free of DNase, RNase, human DNA, endotoxins	Pre-sterilized
790011F	0.1–10	31.5	Single Tray	▪	10 x 96
783201*	0.1–10 Extended	46	Single Tray	▪	10 x 96
790021F	0.5–20	51	Single Tray	▪	10 x 96
790101F	2–120	51	Single Tray	▪	10 x 96
790201F	5–200	52.5	Single Tray	▪	10 x 96
LH-XF780201	5–200 Extended	77.5	Single Tray	▪	10 x 96
790301F	5–300	52.5	Single Tray	▪	10 x 96
791001F	50–1,000	78	Single Tray	▪	10 x 96
LH-XF781001	10–1,000 Extended	102	Single Tray	▪	8 x 96
791211F	50–1,200	90	Single Tray	▪	10 x 96
LH-795001F	100–5,000	150	Single Tray	▪	1 x 50

\* Filter tip with regular air gap

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[www.sartorius.com](http://www.sartorius.com)