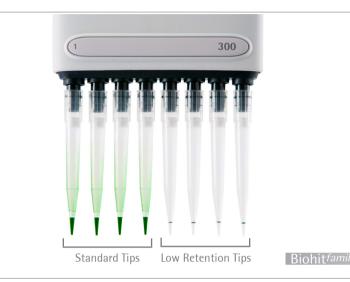


# Low Retention Tips

For maximizing the sample recovery and for improving pipetting precision





Introduction

Pipetting detergent containing liquids can be problematic when using standard pipette tips. There is often residual liquid remaining in the tip due to differences in surface energies between the plastic pipette tip and the sample. This sometimes hard to visualize residue causes imprecision in pipetting, and loss of valuable samples or expensive reagents. To mitigate this issue, extremely hydrophobic low retention tips should be used, when pipetting detergent solutions or other liquids with low surface tension.

## Description

Sartorius Low Retention Tips have been developed to acquire a highly liquidrepellent surface by using a modern patented technology. This method produces tips with complete hydrophobic coverage, and with high chemical resistance. Sartorius Low Retention Tips maximize sample recovery, when pipetting detergent containing solutions or other liquids with low surface tension.

## Features

- Highly liquid-repellent tip surface
- High chemical resistance
- No coating that would interfere with the sample
- Autoclavable (non-filtered tips)
- Available as non-filtered, non-sterile Optifit tips and as sterile SafetySpace<sup>™</sup> Filter tips
- DNase, RNase, endotoxing free (racked tips)

## Applications

In many molecular biology techniques the high sensitivity of the detection methods requires extreme reliability and reproducibility in pipetting. In DNA and protein analysis methods the reagents and samples often contain detergents. By minimizing sample retention and improving reproducibility of pipetting, Sartorius Low Retention Tips are especially beneficial in these applications.

- PCR, real-time PCR
- Cloning
- Sequencing
- Other DNA and RNA techniques
- SDS-PAGE & other protein analysis methods

### Intended use

For liquids with low surface tension (e.g. detergents, solvents).

Note: Due to the high hydrophobicity of the low retention tips, the dispensing volume with aqueous solutions may be slightly lower than the nominal volume. Low Retention tips are not recommended for volumes  $\leq 0.5 \ \mu$ l, when pipetting purely aqueous solutions.

#### Specifications

-		D (
lec	hnical	Data
100	micui	Dutu

Pre-Sterilization method (Filter Tips)	Electron Beam (beta)			
Certificate	Certified DNase, RNase, Endotoxin free by lot number (racked tips only)			
Autoclavability	Trays, racks and non- filtered tips are autoclavable. (121°C, 20 min, 1 bar)			
Filter pore size (Filter Tips)	20-40 μm			

#### Materials & Recyclability

Tip	Polypropylene (PP) Recyclable, plastics can be incinerated as energy waste
Filter (Filter Tips)	Polyethylene (PE) Recyclable, plastics can be incinerated as energy waste
Tray and rack	Polypropylene (PP) Recyclable, plastics can be incinerated as energy waste
Packaging	Cardboard Recyclable, renewable waste

# **Ordering Information:**

# Low Retention Optifit Tips

Article No.		Description	Volume	Length	Packaging	RNase, DNase, endotoxin free	Pre- sterilized Quantity
LH-L790010		Optifit Tip Low Retention	0.1-10 µl	31.5 mm	Single Tray	•	10x96
LH-L790012		Optifit Tip Low Retention	0.1-10 μl	31.5 mm	Refill Tower		10x96
LH-L790200	•	Optifit Tip Low Retention	0.5 <b>-</b> 200 μl	51 mm	Single Tray	•	10x96
LH-L790202	•	Optifit Tip Low Retention	0.5 <b>-</b> 200 μl	51 mm	Refill Tower		10x96
LH-L790350	•	Optifit Tip Low Retention	5-350 µl	54 mm	Single Tray	•	10x96
LH-L790352	•	Optifit Tip Low Retention	5-350 µl	54 mm	Refill Tower		10x96
LH-L791000		Optifit Tip Low Retention	10-1000 µl	71.5 mm	Single Tray	•	10x96
LH-L791200		Optifit Tip Low Retention	50-1200 µl	71.5 mm	Single Tray	•	10x96
LH-L791210		Optifit Tip Low Retention, Ext.	50-1200 µl	90 mm	Single Tray	•	10x96

Low Retention SafetySpace<sup>™</sup> Filter Tips

Article No.		Description	Volume	Length	Packaging	RNase, DNase, endotoxin free	Pre- sterilized	Quantity
LH-LF790011		SafetySpace <sup>™</sup> Filter Tip Low Ret.	0.1-10 μl	32 mm	Single Tray	•	•	10x96
LH-LF790021	•	SafetySpace <sup>™</sup> Filter Tip Low Ret.	0.5-20 μl	51 mm	Single Tray	•	•	10x96
LH-LF790101	•	SafetySpace <sup>™</sup> Filter Tip Low Ret.	2-120 μl	51 mm	Single Tray	•	•	10x96
LH-LF790201	•	SafetySpace <sup>™</sup> Filter Tip Low Ret.	5-200 μl	52.5 mm	Single Tray	•	•	10x96
LH-LF790301	•	SafetySpace <sup>™</sup> Filter Tip Low Ret.	5-300 μl	52.5 mm	Single Tray	•	•	10x96
LH-LF791001		SafetySpace <sup>™</sup> Filter Tip Low Ret.	50-1000 μl	78 mm	Single Tray	•	•	10x96
LH-LF791211		SafetySpace <sup>™</sup> Filter Tip Low Ret.	50-1200 μl	90 mm	Single Tray	•	•	10x96



Low Retention Tips, Single Tray



Low Retention Tips, Refill Tower

Sartorius Lab Instruments GmbH & Co. KG Weender Landstrasse 94–108 37075 Goettingen, Germany

Phone +49.551.3080 Fax +49.551.308.3289

Sartorius Biohit Liquid Handling Oy Laippatie 1 00880 Helsinki, Finland

Phone +358.9.755.951

Fax +358.9.755.95.220

# www.sartorius.com

Specifications subject to change without notice. Printed and copyrighted by Sartorius Biohit Liquid Handling Oy Publication No.: SUL2000-e13091 Order No.: 85037-542-20 Ver. 09|2013