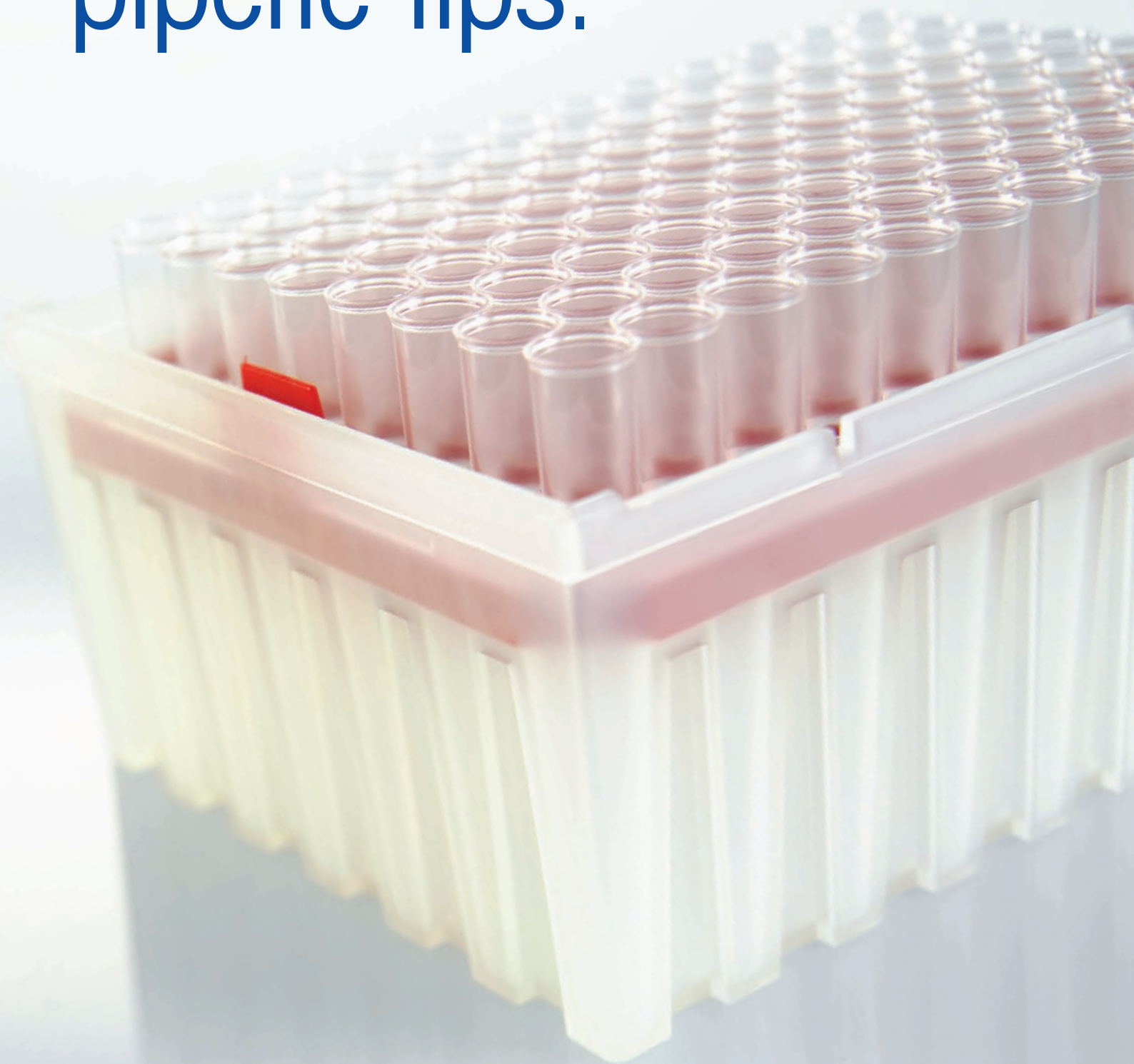


Clean, inert
pipette tips.



Rainin's Tip Manufacturing Facility Designed to Deliver the Cleanest Tips

Rainin's rigorously clean Class 100K manufacturing facility ensures an absence of contamination throughout the manufacturing environment. Full automation eliminates any possibility of human contact with the tips and results in a pristine product without any detectable trace of biological contamination.

Automated material handling

High-capacity vacuum pumps to transfer virgin polypropylene pellets from stainless steel silos to the injection molding machines. Then, to ensure product cleanliness, Rainin's innovative racker system automatically places the tips in the racks, eliminating all human contact during the manufacturing process.

Clean room environment

More than 20,000 sq. ft. of clean rooms specially designed for tip production and packaging. HEPA filters and positive pressure ensure contaminants do not enter the tip production area.

Staff procedures and training

Rainin manufacturing personnel wear masks, gloves and hair nets to reduce the risk of introducing contamination to the tip manufacturing environment.

Rigorous quality assurance testing

Statistically relevant quantities of newly molded tips are continuously sampled from the production line and subjected to rigorous quality testing. Sampling occurs throughout the day at a minimum frequency of once every four hours. Every tip packaged is subjected to 100% visual inspection.

Certification

Filtered and presterilized bioclean tips are sterilized by gamma irradiation and certified.

Protecting sample integrity

Clean pipette tips are critical in life science research

To ensure high quality lab results, tips coming into contact with samples must be free of DNase, RNase, DNA, pyrogen and adenosine triphosphate (ATP). Understanding these typical sample contaminants and taking precautionary measures to reduce or eliminate them at their source is vital to protecting sample integrity.

Contamination originates both in and out of the lab

Human contact is the primary source of contamination. Poor handling procedures can compromise tip purity. The manufacturing process and tip packaging environment are other potential contamination sources that should not be overlooked.

How can contaminants be reduced or eliminated?

Laboratory personnel typically employ a set of procedures to minimize sources of contamination in the lab. But because sample contaminants can originate outside the lab, it is important to evaluate what controls have been put into place at the production level, to assure that possible risk factors have been reduced or eliminated before the product arrives in the lab.

BioClean™ Tips TechZone

Contamination-free Performance

Through innovative design and high-quality production, high-grade Rainin BioClean tips ensure optimal pipetting performance. Manufactured under clean-room conditions, these inert tips are 100% contamination-free, preventing experiment inconsistencies and compromised data fidelity.



BioClean production – no contamination

To ensure high quality lab results, tips must be inert and free of DNase, RNase, DNA, pyrogen and adenosine triphosphate (ATP). Rainin puts great focus on BioClean production by eliminating human contact wherever possible. Our tips are clean.

Perfect production – flawless tip geometry

Virgin polypropylene material and state-of-the-art manufacturing result in flawless Rainin tips. No deformation, cracking, flash, just perfect tip geometry.

FinePoint™ – thin walls for complete liquid transfer

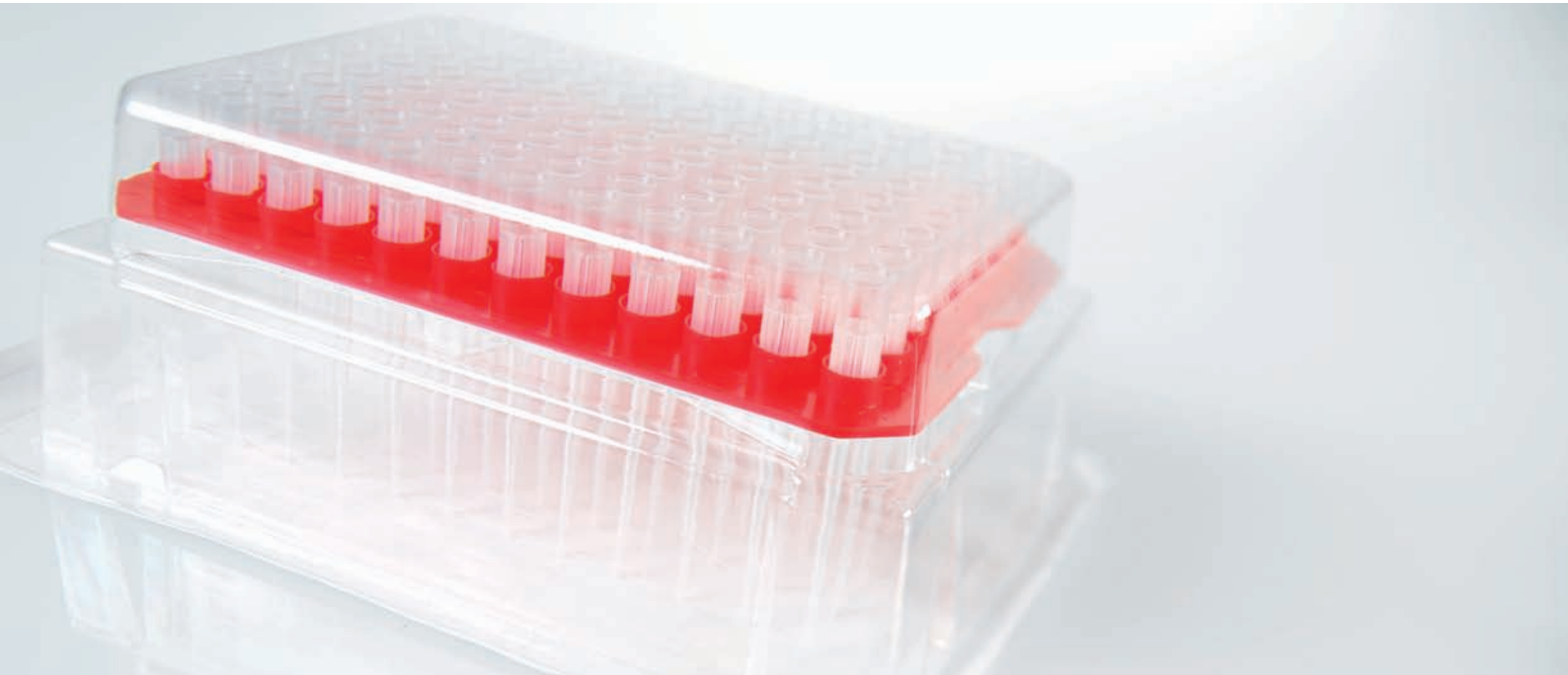
Pipetting accuracy demands an ability to completely dispense the liquid sample from the pipette tip. FinePoint tips feature an acutely tapered design, coupled with very thin tip walls. This results in a subtle, highly flexible pipette tip. The exceedingly thin wall at the orifice end of the tip prevents residual amounts of fluid from clinging to the end of the tip during dispensing. When drawn against the wall of a vessel, the FinePoint design allows for complete touch-off and discharge of the last trace of fluid from the tip.

Ecologically friendly

Innovative packaging solutions for tip rack refilling significantly reduce plastic waste.

Rainin BioClean Tips

With a wide array of tips, in a variety of feature-sets, volume ranges and packaging options, scientists can always work with the optimal application-specific pipetting system. LTS LiteTouch™ and traditional-shaft designs.



Certified contamination-free

BioClean filter and presterilized tips are gamma irradiated to guarantee product sterility. Tested in both internal and external labs, these tips are certified free of DNase, RNase, DNA, pyrogens and ATP. A test certificate is included in each package.

Highest quality

Virgin polypropylene. State-of-the-art manufacturing.

Large Variety

The large selection of available sizes, packaging options, and technical variations provides the ideal tool for every application.

High quality production

- BioClean tips and packaging: contamination-free
- Flawless tip geometry

Innovative designs

- LTS LiteTouch System
- Space Saver reduces plastic waste and lab clutter

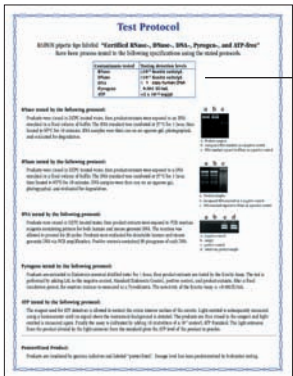
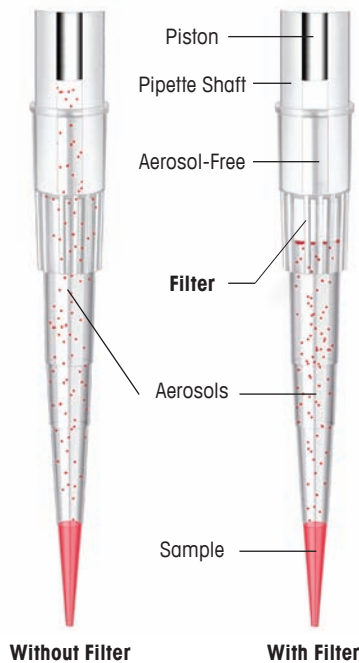
Wide selection of tips

- Optimized, application – specific tip designs
- Many volume ranges
- Green packaging options

Aerosol Resistant Tips

Protection against Aerosol Contamination

Rainin's Aerosol Resistant tips are your best choice for preventing aerosols and liquids in the tip from reaching and contaminating the pipette shaft. Effective in preventing sample cross-contamination in all PCR-based applications, such as genotyping, qPCR and forensic analyses.



Contaminants Tested	Testing Detection Levels
RNase	$\leq 10^{-9}$ Kunitz units/ μ l
DNase	$\leq 10^{-7}$ Kunitz units/ μ l
DNA	< 1 copy human DNA
Pyrogens (LAL test)	0.001 EU/ml
ATP	< 10^{-12} mg/ μ l

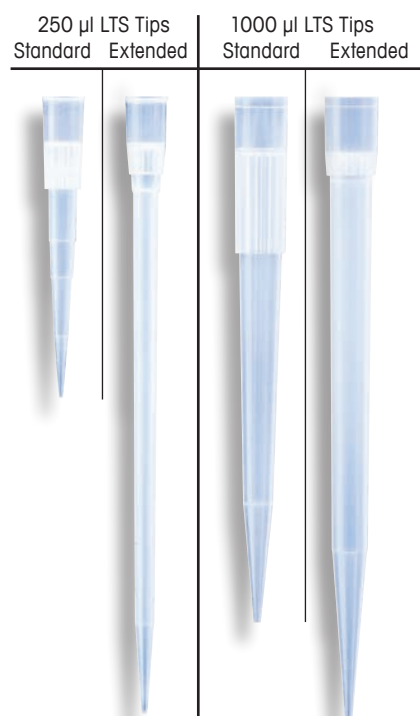
Hydrophobic filter eliminates contamination
Hydrophobic filter forms a barrier against aerosols and liquids, eliminating potential sample and pipette cross-contamination that could jeopardize results.

Pure polyethylene filters contain no additives
The filters in Rainin's aerosol-resistant tips are comprised of an exceptionally dense matrix of sintered polyethylene particles. Unlike other filter types contain additives that can inhibit enzymatic reactions, Rainin filters are composed of pure polyethylene. These sintered particles form a hydrophobic, tortuous path matrix (average pore size: 40 μ m) that prevent aerosols and liquids from being aspirated into the body of the pipette.

Certification
Filtered and presterilized bioclean tips are gamma-radiated to ensure the packaged product is completely sterile. In addition, each tip lot is process-tested to specifications shown here and labeled "Certified free of DNase, RNase, DNA, pyrogen, and ATP." A test protocol certificate is included in each package.

Specialty Tips

For Specialized Research



Low-retention LTS tip



Minimal retention
of dense sample

Generic tip



Dense sample binding
in standard tips

Extended-length tips

For pipetting into tall narrow tubes

102 mm long

Rainin extended-length LTS tips will reach to the bottom of blocks, tall vials, flasks, 100 mm tubes, etc.

Narrow diameter

These tips will pass through 8 mm ID penetrable septa, such as on the Gen-Probe™ APTIMA™ specimen collection kits. Reach the bottom of these vials easily, without the pipette shaft touching the vessel wall and becoming contaminated.

Racked for convenience

Supplied in racks, standard, presterilized and with aerosol-resistant filters. RT-L1000X and RT-L1000XS tips hold a full 1200 µl volume.

Low-retention tips

For pipetting proteins, enzymes and DNA

Ultra-hydrophobicity

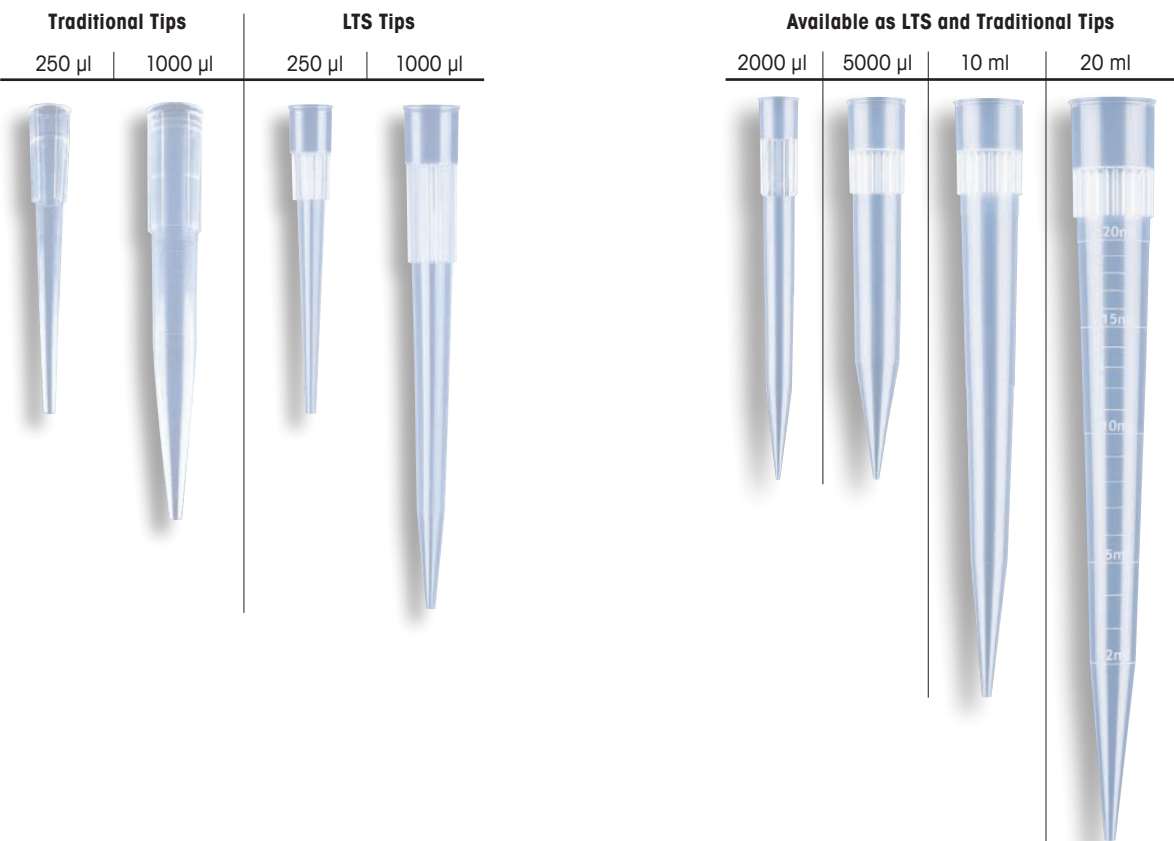
Unlike other companies that dip or coat their tips, Rainin employs a special molding process to integrate a fluoropolymer additive homogeneously throughout the entire tip. This avoids problems associated with inconsistent and incomplete coatings. The exposed trifluoromethyl additive reduces interaction between the aspirated liquid and the polypropylene tip matrix, resulting in an exceptionally hydrophobic tip surface that is not affected by autoclaving. Available in 10, 250 and 1,000 µl LTS tip volumes.

Low-retention tips perform better with demanding samples

Ensure higher pipetting accuracy and reproducibility, even when working with viscous, tenacious samples. Greater pipetting accuracy means less of your valuable samples are wasted.

Specialty Tips

For Your Specialized Research



Wide-orifice tips

Ideal for delicate samples

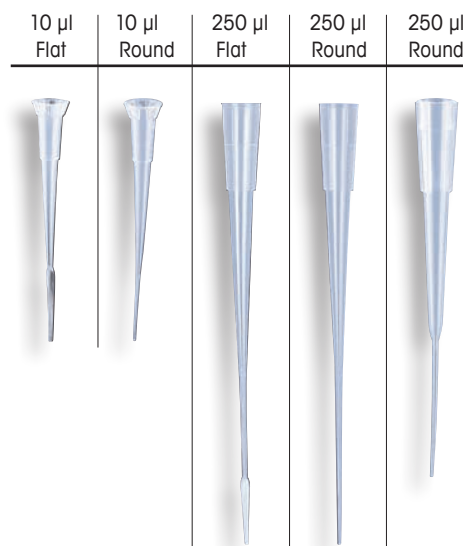
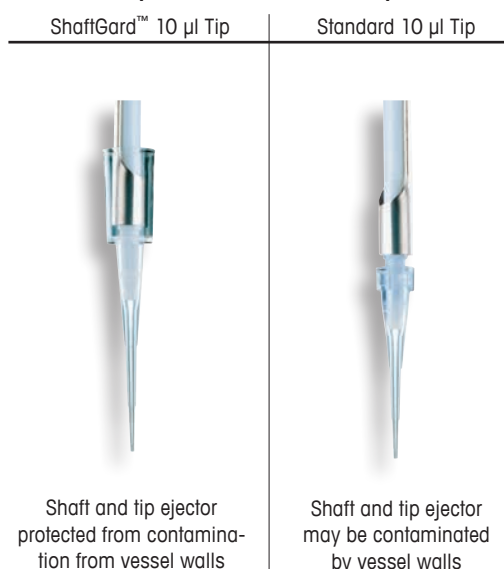
Ideal for delicate samples such as those containing mammalian cells or high-molecular-weight DNA. The wide orifice (1.5 mm) minimizes shear forces on delicate samples and flow resistance for viscous samples.

Large-volume tips

For macro-volume pipetting

Deliver large volumes with the same accuracy as smaller volumes. 2000 µl tips are available in removable cover racks, standard, presterilized, and with aerosol-resistant filters. 5000 µl tips are also available in removable-cover racks, standard or presterilized. 20 ml tips (LTS only) have graduation marks. Both 10 ml and 20 ml tips are available presterilized in individual packets, as well as in bulk.

ShaftGard™ and Gel-Well™ Tips only available as Traditional Tips



ShaftGard™ 10µl tips

Best against cross-contamination

Complete protection of shaft and tip ejector

With ShaftGard tips, the shaft and tip ejector are protected from accidental contamination, reducing the need to decontaminate or sterilize the shaft and tip ejector when working with biological, radioactive, or other critical samples.

Contamination-free tip ejection

The tip ejector is enclosed by the tip and ejects the tip by pressing on the “shoulder” inside the tip – affording further protection against contamination.

Longer for microtube access

ShaftGard tips are significantly longer than standard micro-10 tips for easier access into microcentrifuge and PCR tubes. Use with 2 and 10 µl pipettes with traditional, conical shafts.

Gel-Well™

Great for gels in narrow wells

Designed for dispensing samples into narrow wells in electrophoretic slab gel apparatus, for sample recovery, or when high accuracy is required at low volumes. The flexible ultra-thin micro-capillary is ideal for DNA sequencing and protein separation. Autoclave cycles at 1 bar and 121° C up to 15 minutes are possible without significant capillary shrinkage or closure.

- Available with flat or round tip ends
- Certified RNase/DNase-free

Fit pipettes of major manufacturers, such as Eppendorf, Gilson, BioHit, as well as the traditional (non-LTS) Rainin pipettes.

BioClean™ Tips in Green Packaging

Reducing Waste at the Source

Many labs are concerned with reducing environmental impact. Rainin has long been a pioneer in addressing these concerns through innovative package design for tip-rack refilling to reduce plastic waste at the source.



Green-Pak™ SpaceSaver™ – 85% less waste

Stacked refills reduce waste and save space

Standard or presterilized Your selection

Contamination-free Protected from contamination

Fast loading Packing 96 tips takes seconds

Save space Needs only 35% of the space used by 10 conventional tip racks

Ecological Shell is made from recycled water bottles.



Green-Pak™ – 75% less waste

Refills with aerosol-resistant tips

Standard, presterilized and with filter Your choice

Protected Each refill is completely sealed.

No contamination

Fast trouble-free loading Easy to align over the empty rack

Ecological Recyclable code 1 PET shell

Rainin Tip Packaging Options

With a wide choice of packaging options, from standard racks to bulk tips to the waste-reducing SpaceSaver refills, Rainin has the perfect tip packaging for you.



Waste from 10 Racks

85% Less



Waste from SpaceSaver



Seeing is believing

Plastic waste comparison

The photo shows the plastic waste from 10 empty 96-place racks, and that from an equivalent number of Green-Pak SpaceSaver stacked refills. Green-Pak SpaceSaver reduces waste by about 85%, compared to regular racks.

Removable-cover racks

Backbone of Rainin's ecological refill system

Standard, presterilized and with filter You choose

Refillable SpaceSaver and Green-Pak designed to refill these racks

Fast tip loading The sturdy, non-flexing shelf construction allows easy tip loading with single and multichannel pipettes

Protected Sealed bottoms and overlapping lids protect tips from particulates and micro-organisms

Autoclavable Two-position lid allows autoclaving with the lid in the vent position

Economical bulk tips

High quality, practically zero waste

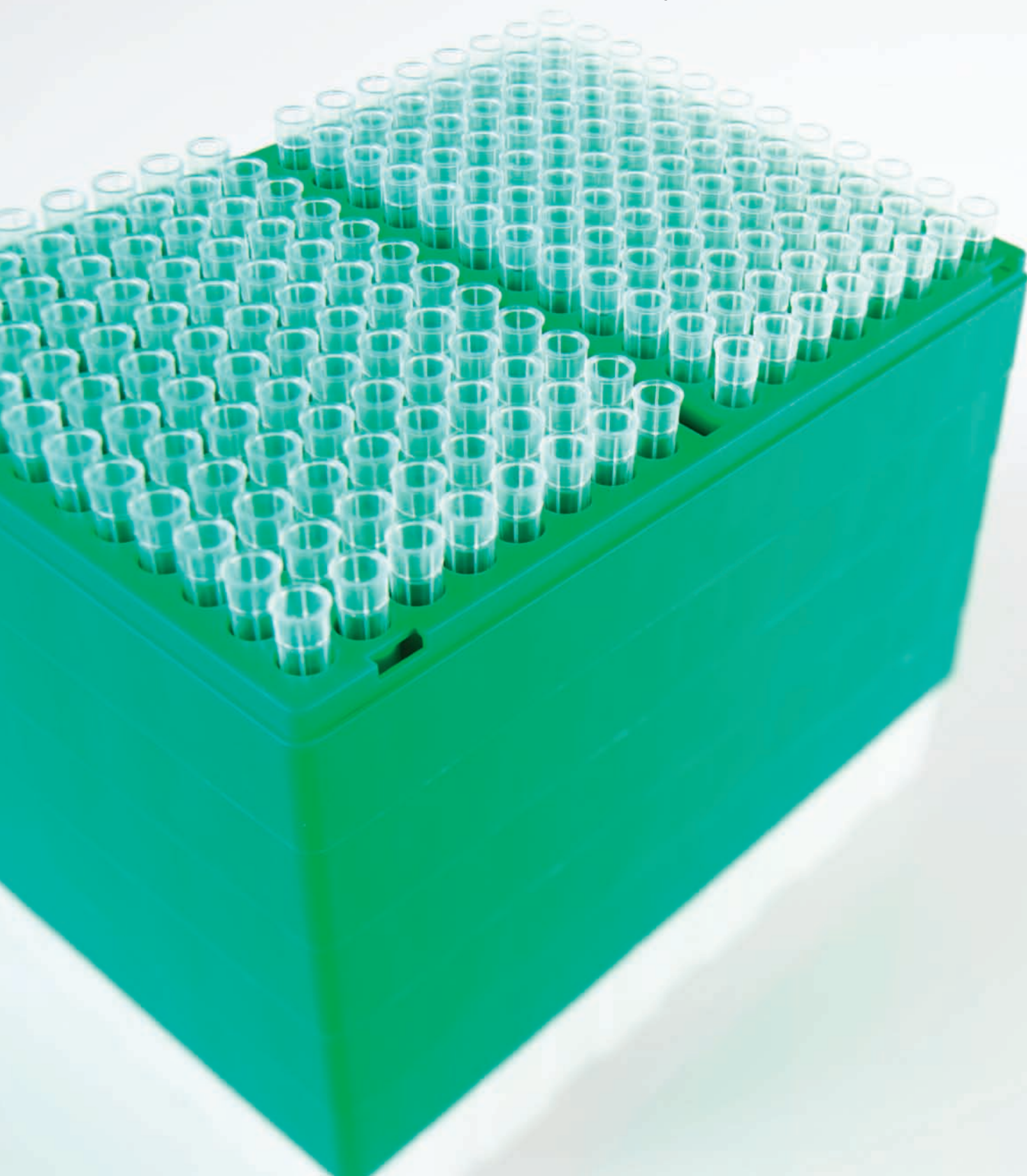
Bulk tips are available in the following sizes:

LTS: 10, 250, 300, 1000, 1200, 2000, 5000 μ l, 10 ml, and 20 ml.

Traditional: 10, 250, 1000, 2000, 2500, 5000 μ l and 10 ml.

10 ml and 20 ml are also available individually wrapped and presterilized.

Choose the most efficient
double-96 format product
for your application.



StableStak™ and StableRak™

Maximum Stability for Multichannel Work

Rainin's unique Double-96 format systems have been designed for multichannel, high-production environments. Each layer contains 192 easy-loading tips, and rubber feet prevent skidding. Ideal for working in hoods or other confined pipetting environments.



StableStak – multilayer stacks

Save space, get 60% less waste!

- One StableStak (960 tips in 5 layers) replaces ten 96-place racks
- Each layer has 192 tips ready for use at once!
- Available in filter, presterilized, and standard in 10, 250, 300, 1000, and 1200 µl volumes

StableRak – individual racks

Ideal for filter-tip users, 35% less waste

- Contains 192 tips in one rack
- Five StableRaks (960 tips) replace ten 96-place racks
- Available in standard and presterilized in 10, 250, 300, and 1000 µl volumes


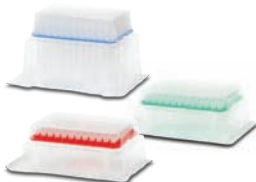

Easiest to use Deep-well for quick tip mounting





Stable Non-skid rubber feet keep the racks in place

Rigid Strong flat trays for even tip loading

Double-96 format Saves time, increases productivity

LTS Tips for Rainin LTS Pipettes

	Cat. No.	MT Order No.	Description	Maximum Capacity	Fits LTS Pipette	Type
	Removable-cover racks					
	RT-L10	17002930	960 tips in 10 racks	20 µl	2, 10, 20 µl	
	RT-L10S	17002929	960 tips in 10 racks	20 µl	2, 10, 20 µl	Presterilized
	RT-L10F	17002928	960 tips in 10 racks	20 µl	2, 10, 20 µl	Filter, presterilized
	RT-L250	17002932	960 tips in 10 racks	200 µl	50,100, 200 µl	
	RT-L250S	17002931	960 tips in 10 racks	200 µl	50,100, 200 µl	Presterilized
	RT-L200F	17002927	960 tips in 10 racks	200 µl	50,100, 200 µl	Filter, presterilized
	RT-L250W	17007102	960 tips in 10 racks	200 µl	50,100, 200 µl	Wide-orifice
	RT-L250WS	17007101	960 tips in 10 racks	200 µl	50,100, 200 µl	Wide-orifice, presterilized
	RT-L300	17002935	768 tips in 8 racks	300 µl	300 µl	
	RT-L300S	17002934	768 tips in 8 racks	300 µl	300 µl	Presterilized
	RT-L300F	17002933	768 tips in 8 racks	300 µl	300 µl	Filter, presterilized
	RT-L1000	17002922	768 tips in 8 racks	1000 µl	1000 µl	
	RT-L1000S	17002921	768 tips in 8 racks	1000 µl	1000 µl	Presterilized
	RT-L1000F	17002920	768 tips in 8 racks	1000 µl	1000 µl	Filter, presterilized
	RT-L1000W	17007100	768 tips in 8 racks	1000 µl	1000 µl	Wide-orifice
	RT-L1000WS	17007099	768 tips in 8 racks	1000 µl	1000 µl	Wide-orifice, presterilized
	RT-L1200	17006421	768 tips in 8 racks	1200 µl	1200, 1000 µl	
	RT-L1200S	17006420	768 tips in 8 racks	1200 µl	1200, 1000 µl	Presterilized
	RT-L1200F	17006419	768 tips in 8 racks	1200 µl	1200, 1000 µl	Filter, presterilized
	RT-L2000	17002926	480 tips in 8 racks	2000 µl	2000 µl	
	RT-L2000S	17002924	480 tips in 8 racks	2000 µl	2000 µl	Presterilized
	RT-L2000F	17002923	480 tips in 8 racks	2000 µl	2000 µl	Filter, presterilized
	RT-L5000	17002937	192 tips in 8 racks	5000 µl	5000 µl	
	RT-L5000S	17002936	192 tips in 8 racks	5000 µl	5000 µl	Presterilized
	Green-Pak					
	GP-L10	17002424	960 tips in 10 refills	20 µl	2, 10, 20 µl	
	GP-L10S	17002430	960 tips in 10 refills	20 µl	2, 10, 20 µl	Presterilized
	GP-L10F	17002429	960 tips in 10 refills	20 µl	2, 10, 20 µl	Filter, presterilized
	GP-L250	17002425	960 tips in 10 refills	200 µl	50,100, 200 µl	
	GP-L250S	17002431	960 tips in 10 refills	200 µl	50,100, 200 µl	Presterilized
	GP-L200F	17002428	960 tips in 10 refills	200 µl	50,100, 200 µl	Filter, presterilized
	GP-L1000	17002423	768 tips in 8 refills	1000 µl	1000 µl	
	GP-L1000S	17002427	768 tips in 8 refills	1000 µl	1000 µl	Presterilized
	GP-L1000F	17002426	768 tips in 8 refills	1000 µl	1000 µl	Filter, presterilized
	GPR-L10	17001865	Empty racks/lids for any GP/GPS 10 µl refills, red, package of 10			
	GPR-L250	17001863	Empty racks/lids for any GP/GPS 250 µl refills, green, package of 10			
	GPR-L1000	17001864	Empty racks/lids for any GP/GPS 1000 µl refills, blue, package of 8			
	Green-Pak SpaceSaver					
	GPS-L10	17005091	960 tips in 10 refills	20 µl	2, 10, 20 µl	
	GPS-L10S	17005090	960 tips in 10 refills	20 µl	2, 10, 20 µl	Presterilized
	GPS-L250	17005093	960 tips in 10 refills	200 µl	50,100, 200 µl	
	GPS-L250S	17005092	960 tips in 10 refills	200 µl	50,100, 200 µl	Presterilized
	GPS-L300	17005095	768 tips in 8 refills	300 µl	300 µl	
	GPS-L300S	17005094	768 tips in 8 refills	300 µl	300 µl	Presterilized
	GPS-L1000	17005089	768 tips in 8 refills	1000 µl	1000 µl	
	GPS-L1000S	17005088	768 tips in 8 refills	1000 µl	1000 µl	Presterilized
Extended-length tips						
RT-L250X	17008814	768 tips in 8 racks	200 µl	50,100, 200 µl	Ext length	
RT-L250XS	17008815	768 tips in 8 racks	200 µl	50,100, 200 µl	Presterilized, ext length	
RT-L200XF	17008887	768 tips in 8 racks	200 µl	50,100, 200 µl	Filter, presterilized, ext length	
RT-L1000X	17008817	768 tips in 8 racks	1200 µl	1000, 1200 µl	Ext length	
RT-L1000XS	17008818	768 tips in 8 racks	1200 µl	1000, 1200 µl	Presterilized, ext length	
RT-L1000XF	17008819	768 tips in 8 racks	1200 µl	1000, 1200 µl	Filter, presterilized, ext length	

	Cat. No.	MT Order No.	Description	Maximum Capacity	Fits LTS Pipette	Type
	Low-retention tips					
	RT-L10LR	17007955	960 tips in 10 racks	20 µl	2, 10, 20 µl	Low-retention
	RT-L10SLR	17007956	960 tips in 10 racks	20 µl	2, 10, 20 µl	Presterilized, low-ret.
	RT-L10FLR	17007957	960 tips in 10 racks	20 µl	2, 10, 20 µl	Filter, presterilized, low-ret.
	RT-L250LR	17007959	960 tips in 10 racks	200 µl	50,100, 200 µl	Low-retention
	RT-L250SLR	17007960	960 tips in 10 racks	200 µl	50,100, 200 µl	Presterilized, low-ret.
	RT-L200FLR	17007961	960 tips in 10 racks	200 µl	50,100, 200 µl	Filter, presterilized, low-ret.
	RT-L1000LR	17007952	768 tips in 8 racks	1000 µl	1000 µl	Low-retention
	RT-L1000SLR	17007953	768 tips in 8 racks	1000 µl	1000 µl	Presterilized, low-ret.
	RT-L1000FLR	17007954	768 tips in 8 racks	1000 µl	1000 µl	Filter, presterilized, low-ret.
	StableRak double-96 format individual racks					
	SR-L10	17005862	960 tips in 5 racks	20 µl	2, 10, 20 µl	
	SR-L10S	17005861	960 tips in 5 racks	20 µl	2, 10, 20 µl	Presterilized
	SR-L10F	17005860	960 tips in 5 racks	20 µl	2, 10, 20 µl	Filter, presterilized
	SR-L250	17005864	960 tips in 5 racks	200 µl	50,100, 200 µl	
	SR-L250S	17005863	960 tips in 5 racks	200 µl	50,100, 200 µl	Presterilized
	SR-L200F	17005859	960 tips in 5 racks	200 µl	50,100, 200 µl	Filter, presterilized
	SR-L300	17005867	768 tips in 4 racks	300 µl	300 µl	
	SR-L300S	17005866	768 tips in 4 racks	300 µl	300 µl	Presterilized
	SR-L300F	17005865	768 tips in 4 racks	300 µl	300 µl	Filter, presterilized
	SR-L1000	17007083	768 tips in 4 racks	1000 µl	1000 µl	
	SR-L1000S	17007082	768 tips in 4 racks	1000 µl	1000 µl	Presterilized
	SR-L1000F	17007081	768 tips in 4 racks	1000 µl	1000 µl	Filter, presterilized
	SR-L1200	17007086	768 tips in 4 racks	1200 µl	1200, 1000 µl	
	SR-L1200S	17007085	768 tips in 4 racks	1200 µl	1200, 1000 µl	Presterilized
	SR-L1200F	17007084	768 tips in 4 racks	1200 µl	1200, 1000 µl	Filter, presterilized
	StableStak double-96 format stacked racks					
	SS-L10	17005873	960 tips in 5 layers	20 µl	2, 10, 20 µl	
	SS-L10S	17005872	960 tips in 5 layers	20 µl	2, 10, 20 µl	Presterilized
	SS-L250	17005875	960 tips in 5 layers	200 µl	50,100, 200 µl	
	SS-L250S	17005874	960 tips in 5 layers	200 µl	50,100, 200 µl	Presterilized
	SS-L300	17005877	768 tips in 4 layers	300 µl	300 µl	
	SS-L300S	17005876	768 tips in 4 layers	300 µl	300 µl	Presterilized
	SS-L1000	17007090	768 tips in 4 layers	1000 µl	1000 µl	
	SS-L1000S	17007089	768 tips in 4 layers	1000 µl	1000 µl	Presterilized
	Bulk tips					
	RC-L10	17001128	1000 tips in bags	20 µl	2, 10, 20 µl	
	RC-L10/10	17000504	10x1000 tips in bags	20 µl	2, 10, 20 µl	
	RC-L250	17001118	1000 tips in bags	200 µl	50,100, 200 µl	
	RC-L250/10	17000506	10x1000 tips in bags	200 µl	50,100, 200 µl	
	RC-L300	17001132	1000 tips in bags	300 µl	300 µl	
	RC-L1000	17001129	1000 tips in bags	1000 µl	1000 µl	
	RC-L1000/10	17000498	10x1000 tips in bags	1000 µl	1000 µl	
	RC-L1200	17006324	1000 tips in bags	1200 µl	1200,1000 µl	
	RC-L2000	17001130	1000 tips in bags	2000 µl	2000 µl	
	RC-L5000	17001133	1000 tips in bags	5000 µl	5000 µl	
	RC-L10ML	17001119	200 tips in bags	10 ml	10 ml	
	RC-L10MLS	17005940	75 tips individ. wrapped	10 ml	10 ml	Presterilized, individ. wrapped
	RC-L20ML	17001131	100 tips in bags	20 ml	20 ml	
	RC-L20MLS	17005941	50 tips individ. wrapped	20 ml	20 ml	Presterilized, individ. wrapped

Pipette Compatibility with LTS Tips

Fine
Point

Fine Point LTS

20 µL

250 µL

300 µL

1000 µL

1200 µL

2000 µL

Filtered

Macro LTS

5000 µL

10 mL

20 mL





Pipet-Lite XLS




Pipette Model		Recommended Volume Range (µL)	Fine Point LTS										Macro LTS														
			20 µL		250 µL		300 µL		1000 µL		1200 µL		2000 µL		Filtered		5000 µL		10 mL		20 mL						
			RC-L110 / RT-L110 / GP-L110 / SR-L110 / SS-L110 / RT-L110LR	RT-L110S / GP-L110S / GPS-L110S / SR-L110S / SS-L110S / RT-L110SLR	RC-L250 / RT-L250 / GP-L250 / SR-L250 / SS-L250 / RT-L250LR / RT-L250W / RT-L250X	RT-L250S / GP-L250S / GPS-L250S / SR-L250S / SS-L250S / RT-L250SLR / RT-L250WS / RT-L250XS	RC-L300 / RT-L300 / GP-L300 / SR-L300 / SS-L300	RT-L300S / GPS-L300S / SR-L300S / SS-L300S	RC-L1000 / RT-L1000 / GP-L1000 / GPS-L1000 / SR-L1000 / SS-L1000 / RT-L1000LR / RT-L1000W / RT-L1000X	RT-L1000S / GP-L1000S / GPS-L1000S / SR-L1000S / SS-L1000S / RT-L1000SLR / RT-L1000WS / RT-L1000XS	RC-L1200 / RT-L1200 / SR-L1200 / RT-L1200LR	RT-L1200S / SR-L1200S / RT-L1200SLR	RC-L2000 / RT-L2000	RT-L2000S	RT-L110F / GP-L110F / SR-L110F / RT-L110FLR (30 µL)	RT-L200F / GP-L200F / SR-L200F / RT-L200FLR / RT-L200XF (200 µL)	RT-L300F / SR-L300F (300 µL)	RT-L1000F / GP-L1000F / SR-L1000F / RT-L1000FLR (1000 µL)	RT-L1200F / SR-L1200F / RT-L1200FLR (1200 µL)	RT-L1000XF (1250 µL)	RT-L2000F (2000 µL)	RC-L5000 / RT-L5000	RT-L5000S	RC-L10ML	RC-L10MLS (Individually Wrapped)	RC-L20ML	RC-L20MLS (Individually Wrapped)
L-2XLS	0.1 - 2		•	•											•												
L-10XLS	0.5 - 10		•	•											•												
L8-10XLS	0.5 - 10		•	•											•												
L12-10XLS	0.5 - 10		•	•											•												
L-20XLS	2 - 20		•	•											•												
L8-20XLS	2 - 20		•	•											•												
L12-20XLS	2 - 20		•	•											•												
L8-50XLS	5 - 50				•	•										•											
L12-50XLS	5 - 50				•	•										•											
LA8-50XLS	5 - 50				•	•										•											
L-100XLS	10 - 100				•	•										•											
L-200XLS	20 - 200				•	•										•											
L8-200XLS	20 - 200				•	•										•											
L12-200XLS	20 - 200				•	•										•											
L-300XLS	20 - 300						•	•									•										
L8-300XLS	20 - 300						•	•									•										
L12-300XLS	20 - 300						•	•									•										
LA6-300XLS	20 - 300						•	•									•										
LA8-300XLS	20 - 300						•	•									•										
L-1000XLS	100 - 1000								•	•	•	•						•	•								
L8-1200XLS	100 - 1200								•	•	•	•							•								
L12-1200XLS	100 - 1200								•	•	•	•							•								
LA6-1200XLS	100 - 1200								•	•	•	•							•								
LA8-1200XLS	100 - 1200								•	•	•	•							•								
L-2000XLS	200 - 2000												•	•							•						
L-5000XLS	500 - 5000																					•	•				
L-10MLXLS	1 - 10 mL																							•	•		
L-20MLXLS	2 - 20 mL																								•	•	

E4	Pipette Model	Recommended Volume Range (µL)	Fine Point LTS										Macro LTS														
			20 µL		250 µL	300 µL	1000 µL	1200 µL	2000 µL	Filtered	5000 µL	10 mL	20 mL														
			RC-L10 / RT-L10 / GP-L10 / GPS-L10 / SR-L10 / SS-L10 / RT-L10LR	RT-L10S / GP-L10S / GPS-L10S / SR-L10S / SS-L10S / RT-L10SLR	RC-L250 / RT-L250 / GP-L250 / GPS-L250 / SR-L250 / SS-L250 / RT-L250LR / RT-L250W / RT-L250X	RT-L250S / GP-L250S / GPS-L250S / SR-L250S / SS-L250S / RT-L250SLR / RT-L250WS / RT-L250XS	RC-L300 / RT-L300 / GP-L300 / SR-L300 / SS-L300	RT-L300S / GPS-L300S / SR-L300S / SS-L300S	RC-L1000 / RT-L1000 / GP-L1000 / GPS-L1000 / SR-L1000 / SS-L1000 / RT-L1000LR / RT-L1000W / RT-L1000X	RT-L1000S / GP-L1000S / GPS-L1000S / SR-L1000S / SS-L1000S / RT-L1000SLR / RT-L1000WS / RT-L1000XS	RC-L1200 / RT-L1200 / SR-L1200 / RT-L1200LR	RT-L1200S / SR-L1200S / RT-L1200SLR	RC-L2000 / RT-L2000	RT-L2000S	RT-L10F / GP-L10F / SR-L10F / RT-L10FLR (30 µL)	RT-L200F / GP-L200F / SR-L200F / RT-L200FLR / RT-L200XF (200 µL)	RT-L300F / SR-L300F (300 µL)	RT-L1000F / GP-L1000F / SR-L1000F / RT-L1000FLR (1000 µL)	RT-L1200F / SR-L1200F / RT-L1200FLR (1200 µL)	RT-L1000XF (1250 µL)	RT-L2000F (2000 µL)	RC-L5000 / RT-L5000	RT-L5000S	RC-L10ML	RC-L10MLS (Individually Wrapped)	RC-L20ML	RC-L20MLS (Individually Wrapped)
	E4-10XLS	0.5 - 10	•	•											•												
	E8-10XLS	0.5 - 10	•	•											•												
	E12-10XLS	0.5 - 10	•	•											•												
	E4-20XLS	2.0 - 20	•	•											•												
	E8-20XLS	2.0 - 20	•	•											•												
	E12-20XLS	2.0 - 20	•	•											•												
	E8-50XLS	5 - 50			•	•										•											
	E12-50XLS	5 - 50			•	•										•											
	EA8-50XLS	5 - 50			•	•										•											
	E4-100XLS	10 - 100			•	•										•											
	E4-200XLS	20 - 200			•	•										•											
	E8-200XLS	20 - 200			•	•										•											
	E12-200XLS	20 - 200			•	•										•											
	E4-300XLS	30 - 300					•	•									•										
	E8-300XLS	30 - 300					•	•									•										
	E12-300XLS	30 - 300					•	•									•										
	EA6-300XLS	30 - 300					•	•									•										
	EA8-300XLS	30 - 300					•	•									•										
	E4-1000XLS	100 - 1000							•	•	•	•						•	•								
	E8-1200XLS	100 - 1200							•	•	•	•							•								
	EA6-1200XLS	100 - 1200							•	•	•	•							•								
	EA8-1200XLS	100 - 1200							•	•	•	•							•								
	E12-1200XLS	100 - 1200							•	•	•	•							•								
	E4-2000XLS	200 - 2000											•	•						•							
	E4-5000XLS	500 - 5000																			•		•				
	E4-10MLXLS	1 - 10 mL																					•	•			
	E4-20MLXLS	2 - 10 mL																						•	•		

Key: RC - Bulk, RT - Lift-Off-Cover Rack, GP - Green-Pak Refill, GPS - Green-Pak SpaceSaver Refill, SR - StableRak, SS - StableStak

Traditional Tips

	Cat. No.	MT Order No.	Description	Maximum Capacity	Fits Traditional Pipette Model	Type
	Removable-cover racks					
	RT-10	17002896	960 tips in 10 racks	10 µl	2, 10 µl	
	RT-10S	17002905	960 tips in 10 racks	10 µl	2, 10 µl	Presterilized
	RT-10F	17002904	960 tips in 10 racks	10 µl	2, 10 µl	Filter, presterilized
	RT-10G	17002908	960 tips in 10 racks	10 µl	2, 10 µl	ShaftGard
	RT-10GS	17002907	960 tips in 10 racks	10 µl	2, 10 µl	ShaftGard / Presterilized
	RT-10GF	17002906	960 tips in 10 racks	10 µl	2, 10 µl	ShaftGard / Filter, prester.
	RT-20F	17002917	960 tips in 10 racks	30 µl	20, 25 µl	Filter, presterilized
	RT-100F	17002903	960 tips in 10 racks	100 µl	100 µl	Filter, presterilized
	RT-250	17002916	960 tips in 10 racks	250 µl	20, 25, 100, 200, 250 µl	
	RT-250S	17002913	960 tips in 10 racks	250 µl	20, 25, 100, 200, 250 µl	Presterilized
	RT-200F	17002912	960 tips in 10 racks	200 µl	200, 250 µl	Filter, presterilized
	RT-1000	17002902	768 tips in 8 racks	1000 µl	1000 µl	
	RT-1000S	17002901	768 tips in 8 racks	1000 µl	1000 µl	Presterilized
	RT-1000F	17002897	768 tips in 8 racks	1000 µl	1000 µl	Filter, presterilized
	RT-2000	17002911	480 tips in 8 racks	2000 µl	2000, 2500 µl	
	RT-2000S	17002910	480 tips in 8 racks	2000 µl	2000, 2500 µl	Presterilized
	RT-2000F	17002909	480 tips in 8 racks	2000 µl	2000, 2500 µl	Filter, presterilized
	RT-5000	17002919	192 tips in 8 racks	5000 µl	5000 µl	
	RT-5000S	17002918	192 tips in 8 racks	5000 µl	5000 µl	Presterilized
	Green-Pak					
	GP-10	17002419	960 tips in 10 refills	10 µl	2, 10 µl	
	GP-10S	17002415	960 tips in 10 refills	10 µl	2, 10 µl	Presterilized
	GP-10F	17002414	960 tips in 10 refills	10 µl	2, 10 µl	Filter, presterilized
	GP-10G	17002418	960 tips in 10 refills	10 µl	2, 10 µl	ShaftGard
	GP-10GS	17002417	960 tips in 10 refills	10 µl	2, 10 µl	ShaftGard / Presterilized
	GP-10GF	17002416	960 tips in 10 refills	10 µl	2, 10 µl	ShaftGard / Filter, prester.
	GP-20F	17002422	960 tips in 10 refills	30 µl	20, 25 µl	Filter, presterilized
	GP-100F	17002413	960 tips in 10 refills	100 µl	100 µl	Filter, presterilized
	GP-250	17002409	960 tips in 10 refills	250 µl	20, 25, 100, 200, 250 µl	
	GP-250S	17002421	960 tips in 10 refills	250 µl	20, 25, 100, 200, 250 µl	Presterilized
	GP-200F	17002420	960 tips in 10 refills	200 µl	200, 250 µl	Filter, presterilized
	GP-1000	17002412	768 tips in 8 refills	1000 µl	1000 µl	
	GP-1000S	17002411	768 tips in 8 refills	1000 µl	1000 µl	Presterilized
	GP-1000F	17002410	768 tips in 8 refills	1000 µl	1000 µl	Filter, presterilized
	GPR-10	17001860	Empty racks/ lids for GP-10 products, Purple, pkg of 10			
	GPR-10G	17001862	Empty racks/ lids for GP-10G, GPS-10G products, Red, pkg of 10, ShaftGard			
	GPR-250	17001861	Empty racks/ lids for GP-250, GPS-250 products, Green, pkg of 10			
	GPR-1000	17001859	Empty racks/ lids for GP-1000, GPS-1000 products, Blue, pkg of 8			
	Green-Pak SpaceSaver					
	GPS-10G	17005085	960 tips in 10 refills	10 µl	2, 10 µl	ShaftGard
	GPS-10GS	17005084	960 tips in 10 refills	10 µl	2, 10 µl	ShaftGard / Presterilized
	GPS-250	17005087	960 tips in 10 refills	250 µl	20, 25, 100, 200, 250 µl	
	GPS-250S	17005086	960 tips in 10 refills	250 µl	20, 25, 100, 200, 250 µl	Presterilized
	GPS-1000	17005083	768 tips in 8 refills	1000 µl	1000 µl	
	GPS-1000S	17005082	768 tips in 8 refills	1000 µl	1000 µl	Presterilized
	StableStak					
	SS-250	17005869	960 tips in 5 layers	250 µl	20, 25, 100, 200, 250 µl	
	SS-250S	17005868	960 tips in 5 layers	250 µl	20, 25, 100, 200, 250 µl	Presterilized
	SS-300	17005871	768 tips in 4 layers	300 µl	300 µl	
	SS-1000	17007088	768 tips in 4 layers	1000 µl	1000 µl	
	SS-1000S	17007087	768 tips in 4 layers	1000 µl	1000 µl	Presterilized

	Cat. No.	MT Order No.	Description	Maximum Capacity	Fits Traditional Pipette Model	Type
	StableRak					
	SR-20F	17005858	960 tips in 5 racks	30 µl	20, 25 µl	Filter, presterilized
	SR-100F	17005851	960 tips in 5 racks	100 µl	100 µl	Filter, presterilized
	SR-250	17005854	960 tips in 5 racks	250 µl	20, 25, 100, 200, 250 µl	
	SR-250S	17005853	960 tips in 5 racks	250 µl	20, 25, 100, 200, 250 µl	Presterilized
	SR-200F	17005852	960 tips in 5 racks	200 µl	200 µl	Filter, presterilized
	SR-300	17005857	768 tips in 4 racks	300 µl	300 µl	
	SR-300F	17005855	768 tips in 4 racks	300 µl	300 µl	Filter, presterilized
	SR-1000	17007080	768 tips in 4 racks	1000 µl	1000 µl	
	SR-1000S	17007079	768 tips in 4 racks	1000 µl	1000 µl	Presterilized
	SR-1000F	17007078	768 tips in 4 racks	1000 µl	1000 µl	Filter, presterilized
	Specialty tips					
	GT-10-2	17002375	200 tips in 1 rack	10 µl	2, 10 µl	Gel-Well, 0.17 mm
	GT-10-4	17002377	200 tips in 1 rack	10 µl	2, 10 µl	Gel-Well, 0.37 mm
	GT-10-6	17002380	200 tips in 1 rack	10 µl	2, 10 µl	Gel-Well, 0.57 mm
	GT-250-2	17002376	200 tips in 1 rack	250 µl	20, 25, 100, 200, 250 µl	Gel-Well, 0.17 mm
	GT-250-4	17002378	200 tips in 1 rack	250 µl	20, 25, 100, 200, 250 µl	Gel-Well, 0.37 mm
	GT-250-6	17002379	200 tips in 1 rack	250 µl	20, 25, 100, 200, 250 µl	Gel-Well, 0.57 mm
	RC-250W	17001127	1000 tips in bags	250 µl	20, 25, 100, 200, 250 µl	Wide-orifice
	HR-250W	17005716	960 tips in 10 racks	250 µl	20, 25, 100, 200, 250 µl	Wide-orifice
	HR-250WS	17005715	960 tips in 10 racks	250 µl	20, 25, 100, 200, 250 µl	Wide-orifice / Presterilized
	Bulk tips					
	RC-10	17001124	1000 tips in bags	10 µl	2, 10 µl	
	RC-10G	17001123	1000 tips in bags	10 µl	2, 10 µl	ShaftGard
	RC-10/10	17004280	10x1000 tips in bags	10 µl	2, 10 µl	
	RC-250	17001116	1000 tips in bags	250 µl	20, 25, 100, 200, 250 µl	
	RC-250/10	17001975	10x1000 tips in bags	250 µl	20, 25, 100, 200, 250 µl	
	RC-200	17001120	1000 tips in bags	1000 µl	1000 µl	Non-finepoint
	RC-1000	17001121	1000 tips in bags	1000 µl	1000 µl	
	RC-1000/10	17001977	10x1000 tips in bags	1000 µl	1000 µl	
	RC-2000	17001125	1000 tips in bags	2000 µl	2000, 2500 µl	
	RC-2500	17001126	1000 tips in bags	2500 µl	2500 µl	
	RC-5000	17001117	1000 tips in bags	5000 µl	5000 µl	
	RC-10ML	17001122	200 tips in bags	10 ml	10 ml	
	RC-10MLS	17005939	75 tips individ. wrapped	10 ml	10 ml	