



**50**  
**YEARS**  
1959-2009



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# INTRODUCTION

**We are delighted to present you with our new catalog for 2009-2010.**



This year is very special for us as we celebrate our 50th anniversary. In February of 1959, Labcon began business as Ways and Means, Inc. making screw cap containers for salt tablets in Sausalito, California. That year we had only a handful of employees and two molding machines. You could say we have come a long way in 50 years, but we tend to look forward, and wonder what life will be like in another 50 years.



And this year Earth Friendly® is 10 years old. Long before anyone was talking about sustainability or referring to products as “green”, Labcon had introduced products with sustainable packaging and converted most of our pipet tip racks to recycled resins. Labcon will continue to lead the industry in Earth Friendly® solutions for laboratories.

We are also happy to tell you that we have been certified to the ISO 9001:2008 quality standard. This makes Labcon the first in our industry to meet the requirements of the new ISO standard. And ensures you that Labcon products and processes continue to be unmatched in quality anywhere in the world.



In our catalog this year, you will notice that the sections for pipet tips and centrifuge tubes have grown significantly. There are added charts and fit data is more accessible. We also hope you will visit our website at [www.labcon.com](http://www.labcon.com) and see the continuous changes there.



This catalog includes our New Eclipse™ refill system. The Eclipse™ continues our tradition and mission of focusing on sustainable product solutions. Eclipse™ is the most sustainable product system for refilling pipet tips in the world. Most of the package is made from renewable materials. And the Eclipse™ includes the first ever use of 100% compostable plastic resin that helps give Eclipse™ a very low carbon footprint.

Along with Eclipse™ you will see we have greatly expanded our centrifuge tube line to offer PerformR™ centrifuge tubes available in reusable racks, a new Metal Free tube series for analysis work, and UVsafe™ Amber tubes. We also are excited to introduce Viewpoint™ labeling for SuperClear™ centrifuge tubes.

These major new products join many others to make this our largest catalog ever. We hope you enjoy the new format. Please give us your feedback at [www.labcon.com](http://www.labcon.com).



**More Value Than Expected**

We focus on providing you with consistently high value products you can count on in your research. Our pipet tips are available in the broadest array of choices you can find from any pipet tip manufacturer anywhere in the world. We offer loose bag, bulk bag, individually wrapped, 96 hinged rack, double wide 192 hinged rack, 96 and 384 Roborack™, Stack Rack, Eclipse™ and Pagoda® Refills in sterile and non sterile packages for more than 79 tip styles.

**Professional Grade Resins**

All the pipet tips we make start with high quality non-cytotoxic medical grade 100% virgin polypropylenes. Many of our resins are formulated exclusively for us to our specifications. We avoid the low quality commodity resins and recycled plastic like most others use and pre-test all new resins in our research lab from molded samples. These samples are analyzed to see if extractables that interfere with PCR or DNA are present. Although common in polypropylene, we exclude from use those resins with these contaminants since they can give you unpredictable lab results.

**The Art of Pipet Tips**

Pipet tip design is an art. Most pipet tips are designed to fit only one pipettor brand. All pipet tips from pipettor manufacturers are made this way. We design our tips to fit a multitude of pipettors well. A much tougher challenge. With our tips a lab can use one supply of tips for virtually all the pipettors they have. And since our ISO 9001:2008 registered design process guarantees we have thoroughly tested the tips we make you can use our tips with confidence year after year.



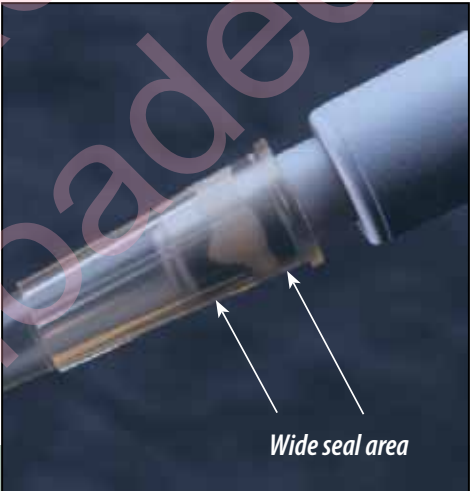
**Choose Your Tips,  
Then your Pipettor**



Although most people decide on a pipettor brand first and then the pipet tips you might do well to consider doing the opposite. Your investment in pipet tips over the life of the pipettor will far exceed the investment you have in the pipettor. Try a range of tips on several pipettors you are evaluating. Check for fit, ease of ejection, quality, packaging options, and overall value. Then purchase a pipettor that works with the tips you have decided to use.



- Expiration date on every rack
- Lot coding on each rack for your security
- Coded for recycling — polypropylene labels recycle with rack
- CE IVD compliant



Wide seal area

**Wide Seals Are Always Better**

Our pipet tips are designed with wide sealing areas instead of sealing rings. Sealing rings limit the seal area to tiny contact strips, and are easy to damage. A wider seal assures that tips will seal easily and consistently without leaking on old as well as new pipettors.



# LIQUID HANDLING



## Quality Beyond Assurance

Through more than 50 years of experience we have developed an exclusive 26 step quality process to provide you with consistent measurable quality. Many people talk about quality. Labcon proves our commitment to quality before registered independent auditors every 6 months. Our validated ISO 9001:2008 quality system has been registered throughout the world for more than a decade. Every style tip we make is tested lot by lot, every day, hour by hour using a valid documented sampling method. We check for fit, function, reproducibility, accuracy, liquid retention, contamination, clarity, ease of ejection, and smooth open orifices. Labcon is also the only major supplier of pipet tips in the world to operate from a U.S. Food and Drug Administration registered medical device facility.

## Laboratory Developed and Tested

In 1996 we built and equipped our own research laboratory that we use to test and develop our products, resins, methods, and other competing products. This investment in equipment and staff lets us duplicate the environment for our products and the protocols you use. In this way you can have full confidence that we have anticipated what you might encounter when using Labcon products.

All our pipet tips in this catalog are made with high quality non-cytotoxic medical grade 100% radiation stabilized virgin polypropylene. These resins are pre-tested from molded samples to determine if extractables that interfere with PCR or DNA are present. Although common in resins used by other suppliers, we exclude from use those resins that have high levels of extractables in the 240 to 320nm range, as they would interfere with your ability to quantify DNA.

## What is Pre-Sterilized? Irradiated? Gamma Processed?

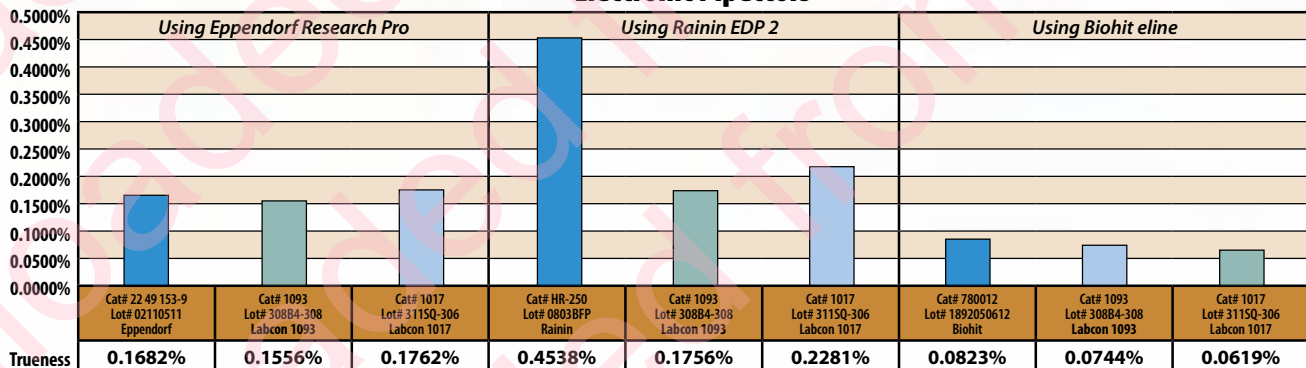
Labcon sterile products have been certified sterile using a validated medical sterile process. Some others offer irradiated or “pre-sterile” product without any sterile testing or label their product “for research only”. This means they have not done the work to qualify their product as really being sterile. We follow the ISO 11137 procedures for sterility. Our sterile products are labeled sterile and all bioburden studies have been completed and are on file. So when you get sterile product from us, it really is. We also only use the higher quality Radiation Stabilized medical grade resins. Many other suppliers use lower grade commodity resins without radiation stabilization in their tips and then use the less reliable Beta, or “E-Beam” sterilization process to prevent their tips from yellowing. Labcon uses the more reliable Gamma Irradiation process that ensures your product is really sterile. That’s why you will notice our pipet tips and tubes are flexible, fit better, and are not stiff and brittle like other suppliers.

## Labcon Pipet Tips Outperform Original Tips

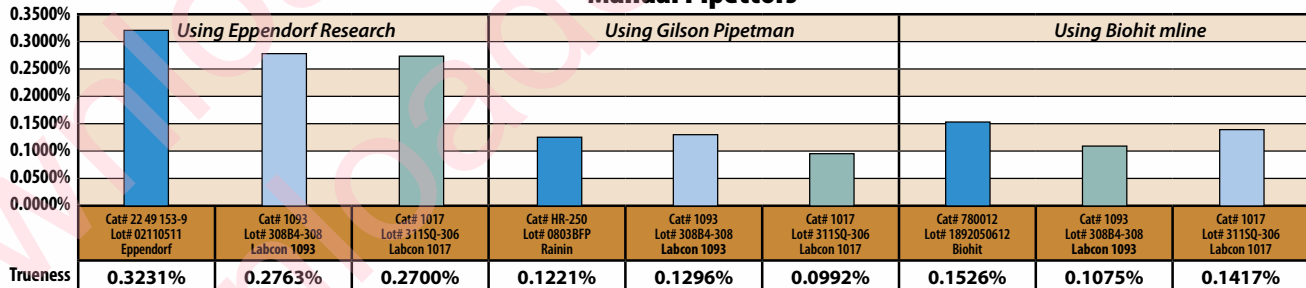
Most pipettor manufacturers state that their pipettors perform best when used with their own brand of pipet tips. We put that claim to the test with three well known brands of pipettors. In all the tests summarized below and the data shown on page 5 we used a well known pipettor and the tips recommended by the pipettor manufacturer.

To make this an even more difficult test we did not calibrate the pipettor for Labcon tips. Instead, we left the pipettor set to the calibration we found it with. This method more readily matches the performance testing required for ISO 8655 certification.

### Electronic Pipettors



### Manual Pipettors



Best results are in green; lower % is better.



See charts on page 4.

### MANUAL PIPETTORS TEST

Tip Brand/Tip Data	Dim.	DATA (1-20)										Min.	Max,	Median	Mean	CV
--------------------	------	-------------	--	--	--	--	--	--	--	--	--	------	------	--------	------	----

#### Eppendorf Research

<b>Eppendorf</b> Cat.#22 49 153-9; Lot #02110511 1135	0.1997	0.2008	0.2008	0.1996	0.1994	0.1988	0.1995	0.1991	0.1987	0.1988	0.1988	0.1985	0.2008	0.1994	0.1994	0.3231%
		0.1998	0.1993	0.1985	0.2003	0.1995	0.1995	0.1994	0.1990	0.1992	0.1989					
<b>Labcon 1093</b> Cat.#1093; Lot #308B4-308	0.1997	0.2009	0.2000	0.1992	0.1991	0.1994	0.1984	0.1996	0.1994	0.1991	0.1992	0.1984	0.2009	0.1993	0.1994	0.2763%
		0.1998	0.1992	0.1989	0.1999	0.1997	0.1997	0.1993	0.1987	0.1989	0.1989					
<b>Labcon 1017</b> Cat.#1017; Lot #311SQ-306	0.1997	0.2005	0.2002	0.2007	0.1995	0.1992	0.1990	0.1992	0.1991	0.1992	0.1993	0.1985	0.2007	0.1993	0.1995	0.2700%
		0.1995	0.1985	0.1990	0.2001	0.1995	0.1995	0.1992	0.1993	0.1991	0.1995					

#### Gilson P-200

<b>Rainin</b> Cat.#HR-250; Lot #0803BFP	0.1997	0.2002	0.1999	0.1993	0.1996	0.1996	0.1996	0.1995	0.1997	0.1995	0.1995	0.1993	0.2002	0.1996	0.1997	0.1221%
		0.2001	0.1996	0.1996	0.1997	0.1993	0.2001	0.1996	0.1995	0.1996	0.1996					
<b>Labcon 1093</b> Cat.#1093; Lot #308B4-308	0.1997	0.1997	0.1996	0.1999	0.1996	0.1994	0.1995	0.1995	0.1996	0.1997	0.1995	0.1990	0.1999	0.1995	0.1994	0.1296%
		0.1992	0.1993	0.1992	0.1993	0.1991	0.1999	0.1993	0.1992	0.1990	0.1992					
<b>Labcon 1017</b> Cat.#1017; Lot #311SQ-306	0.1997	0.1998	0.1996	0.1995	0.1997	0.1996	0.1997	0.1995	0.1999	0.1999	0.1997	0.1993	0.2000	0.1996	0.1996	0.0992%
		0.1995	0.1985	0.1990	0.2001	0.1995	0.1995	0.1992	0.1993	0.1991	0.1995					

#### Biohit Proline 50-200

<b>Biohit</b> Cat.#780012; Lot #1892050612	0.1997	0.2005	0.2005	0.2000	0.2005	0.1999	0.1997	0.2002	0.2002	0.1996	0.1998	0.1996	0.2005	0.2000	0.2000	0.1526%
		0.2003	0.2000	0.1999	0.2002	0.1997	0.1996	0.2001	0.1998	0.1996	0.1998					
<b>Labcon 1093</b> Cat.#1093; Lot #308B4-308	0.1997	0.2002	0.2000	0.1999	0.2001	0.1997	0.2002	0.2002	0.2000	0.2000	0.1997	0.1995	0.2002	0.1999	0.1999	0.1075%
		0.1998	0.1999	0.2000	0.1998	0.1996	0.1996	0.2001	0.1997	0.1998	0.1995					
<b>Labcon 1017</b> Cat.#1017; Lot #311SQ-306	0.1997	0.2005	0.2002	0.2001	0.2001	0.2002	0.2002	0.2004	0.2004	0.2001	0.1997	0.1994	0.2005	0.2001	0.2000	0.1417%
		0.2001	0.2000	0.2000	0.1998	0.1994	0.1996	0.2001	0.1997	0.1999	0.1998					

### ELECTRONIC PIPETTORS TEST

Tip Brand/Tip Data	Dim.	DATA (1-10)										Min.	Max,	Median	Mean	CV
--------------------	------	-------------	--	--	--	--	--	--	--	--	--	------	------	--------	------	----

#### Eppendorf Research Pro 20-300µL Electronic at 200µL

<b>Eppendorf</b> Lot #02110511 1135		0.1991	0.1990	0.1989	0.1989	0.1985	0.1984	0.1985	0.1980	0.1985	0.1987				0.1987	0.1682%
<b>Labcon 1093</b> Lot #308B4-308		0.1993	0.1992	0.1988	0.1989	0.1986	0.1985	0.1985	0.1985	0.1985	0.1985				0.1987	0.1556%
<b>Labcon 1017</b> Lot #311SQ-306		0.1095	0.1078	0.1091	0.1096	0.1093	0.1091	0.1090	0.1091	0.1091	0.1088				0.1091	0.1762%

#### Using Rainin EDP2 at 100µL

<b>Rainin</b> Lot #0803BFP		0.1095	0.1078	0.1091	0.1096	0.1093	0.1091	0.1090	0.1091	0.1091	0.1088				0.1091	0.4538%
<b>Labcon 1093</b> Lot #308B4-308		0.1091	0.1091	0.1091	0.1091	0.1088	0.1088	0.1090	0.1088	0.1087	0.1086				0.1089	0.1756%
<b>Labcon 1017</b> Lot #311SQ-306		0.1093	0.1092	0.1092	0.1092	0.1091	0.1086	0.1089	0.1088	0.1088	0.1087				0.1089	0.2281%

#### Using Biohit eLine e300 at 200µL

<b>Biohit</b> Lot #1892050612		0.1986	0.1984	0.1982	0.1981	0.1982	0.1981	0.1984	0.1984	0.1982	0.1984				0.1983	0.0823%
<b>Labcon 1093</b> Lot #308B4-308		0.1986	0.1983	0.1983	0.1984	0.1982	0.1981	0.1983	0.1983	0.1985	0.1982				0.1983	0.0744%
<b>Labcon 1017</b> Lot #311SQ-306		0.1987	0.1985	0.1985	0.1986	0.1984	0.1983	0.1985	0.1985	0.1985	0.1983				0.1985	0.0619%

Note: Cat.# for tips in electronic pipettor test are the same as manual pipettor test.

# LIQUID HANDLING

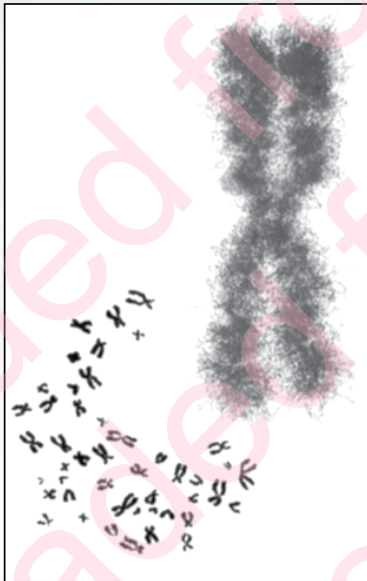
## Routine Certification Testing

### **Nuclease (Rnase and Dnase)**

This is our proprietary assay to detect nucleases and is performed on every lot of product after final packaging. Certificates showing the results of the testing are kept on file for every lot of product. These, and all our lab test certificates are available at [www.labcon.com](http://www.labcon.com).

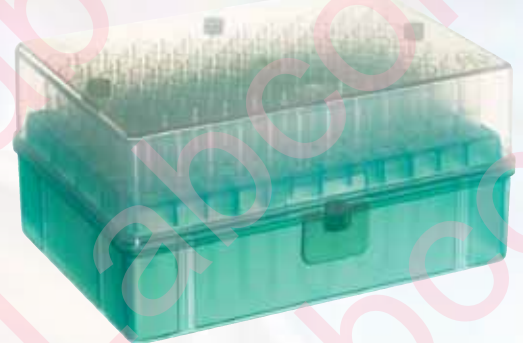
### **Endotoxin**

Using the kinetic turbidimetric limulus amoebocyte lysate assay we test every sterile lot of pipet tips, centrifuge tubes, microtubes, and culture tubes for endotoxin contamination. All sterile products must show endotoxin levels of less than 0.05EU/mL. This level of assurance is greater than that permitted for medical devices.



### **DNA**

Using a laboratory developed protocol, we test for the presence of Human DNA on our Classic and Premier Pipet Tips and SuperClear brand products. These products are certified to be pure of Human DNA to a detection level of less than 1 picogram of DNA.



### **Protease**

Labcon developed the first industry assay for protease detection on labware in 2002. We now certify our SuperSlik low binding pipet tips are free of detectable protease contamination. This makes these tips perfect for protein research.

### **Bioburden and Sterile Validation**

Studies to detect microbial contamination on our products are done according to AAMI/ISO 11137-1994 guidelines and are performed every three months by an outside laboratory. This data is used to determine the radiation level needed for sterilization and allows us to guarantee a sterility assurance level (SAL) between  $10^{-5}$  and  $10^{-6}$  for all our sterile products.

### **Trace Metals**

The U.S.P (231) test for heavy metals is completed for all the resins we use and must show results less than 1 ppm as proscribed by this test protocol.

### **Resin Validation**

All resins are checked using spectroscopy before we accept them for use to determine if they contain extractables that may interfere with PCR or DNA analysis.



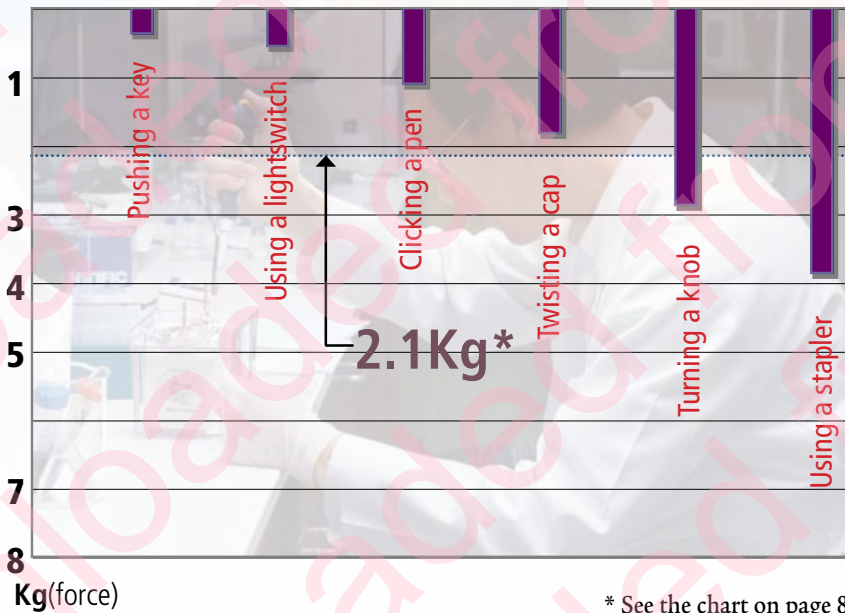
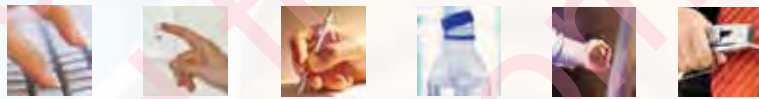
# LIQUID HANDLING

## Premier™ Low Force Pipet Tips for all popular pipettors



The repetitive work of mounting and ejecting pipet tips can place significant demands on your body and place you more at risk for some types of repetitive strain injuries. These Labcon pipet tips are designed to fit onto most popular pipettors and eject with forces shown to help reduce the risk of injury. By using Labcon Low Force tips you don't have to invest in special pipettors to gain all the advantages of low force pipetting.

Labcon pipet tips not only mount and eject with low force, they are made of clear pretested medical grade polypropylene and lot certified pure and free of human DNA, DNase, RNase, and they are non-pyrogenic. These tips are also available with autoclavable aerosol filters and in validated sterilized versions unlike the non-validated "pre-sterilized" product available from other suppliers. Moreover, every rack is labeled with the product number, production lot, recycling code, expiration date, and effective volume range of the tips inside.



\* See the chart on page 8.

### Other everyday tasks and the force required

In order to better understand how the forces in repetitive pipetting relate to those activities we do everyday, we measured those same forces involved in our everyday tasks.

At left is a chart of the results of this study. Compare the chart of forces at left to the chart on the next page to see how much work it takes for simple tasks. This is a good way of communicating to others the dynamic forces represented by repetitive pipetting. It also helps us to understand that ejecting pipet tips, using Labcon tips, uses less force on most pipettors than twisting the cap on a water or soda bottle.



Every lot of Low Force tips is tested for RNase/DNase (Nuclease), Human DNA, and are tested and certified non-pyrogenic. Metals testing is done on a resin by resin basis.



Every rack is labeled with critical information

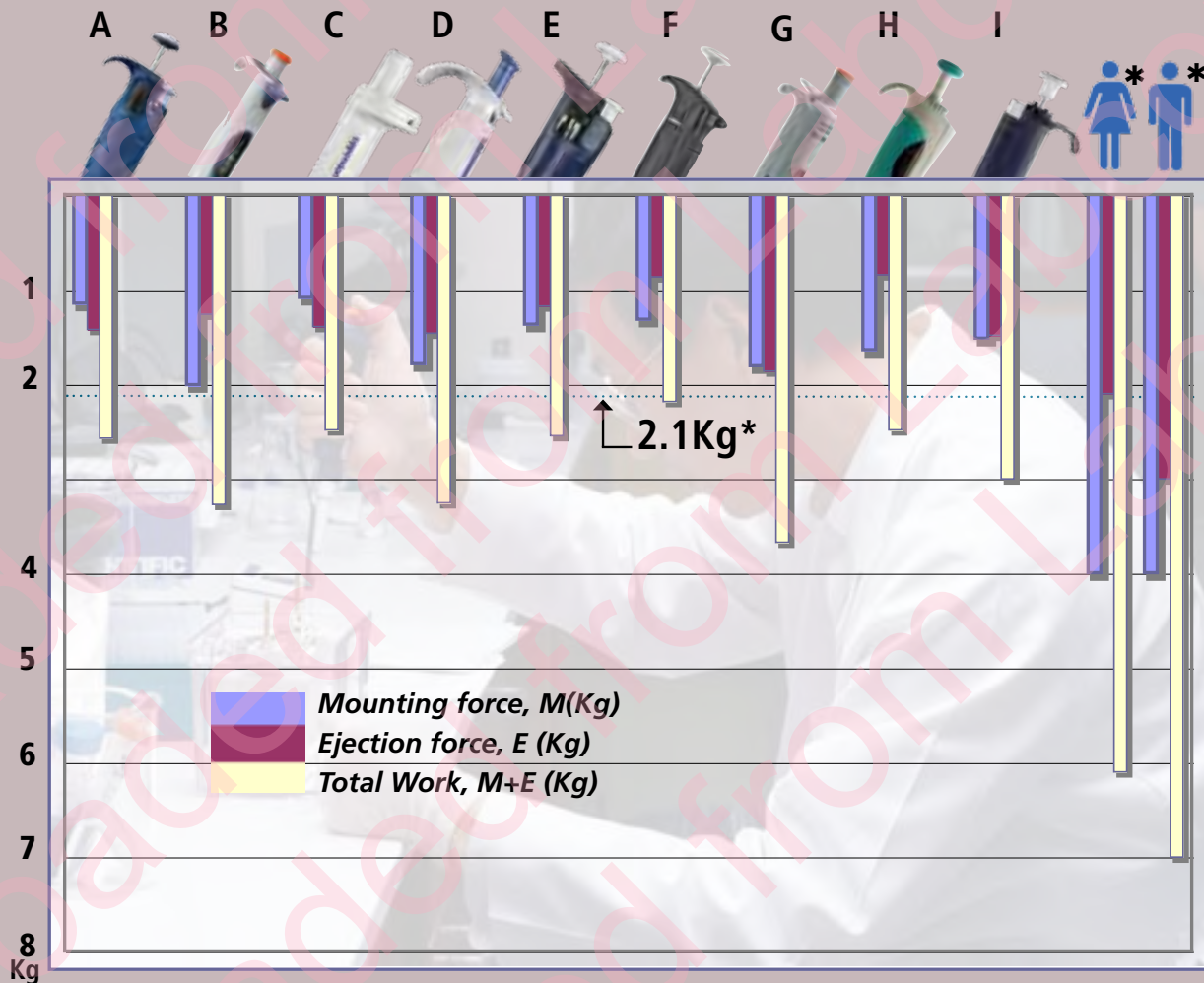


# LIQUID HANDLING

## Premier™ Low Force Pipet Tips for all popular pipettors

### Labcon Low Force pipet tips are proven to exceed accepted standards\* for reduced mounting and ejection forces

The chart below summarizes actual data from a study of the dynamic forces required to mount and eject 200µL Labcon tips from the pipettor brands shown. Results were obtained using a calibrated force gauge and the manufacturers' directions for use of the pipettor and tip mounting. Noted at the right of the chart for reference is a well accepted force norm for mounting and ejecting pipet tips by women and men\*. Values shown are in Kilograms of force.\*\* This study shows that use of Labcon tips, in combination with major brands of pipettors reduced the mounting and ejection forces to levels lower than accepted standards for women and men on all major pipettors. Ejection and mounting is also shown combined since they represent a realistic picture of the work forces you might experience in actual everyday use.†



***This actual use data shows that Labcon Low Force tips effectively mount and eject at forces that are low enough to reduce the potential for repetitive strain injuries without the purchase of special pipettors.***

#### Pipettors Used In Study

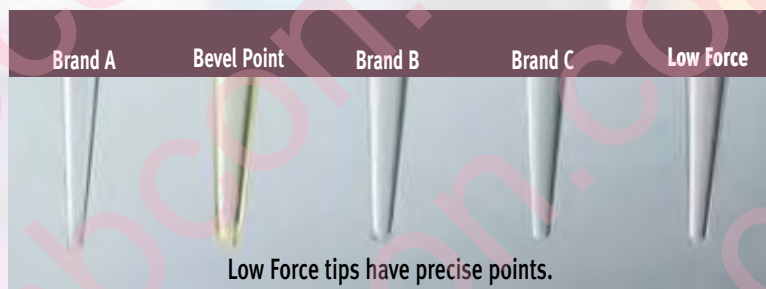
- A. Labnet Discovery
- B. Biohit® mLine®
- C. Eppendorf®
- D. Hamilton® Softgrip®
- E. Gilson® Pipetman®
- F. Gilson® Ultra®
- G. Socorex® Acura®
- H. Thermo® Finnpiptette® Focus®
- I. Rainin® Lite Touch® 200\*\*\* †

\*These values represent one recommendation of the maximum dynamic force that should be used repeatedly to eject pipet tips. This value for women is less than 2.1Kg and for men is 3.0Kg. Maximum recommended mounting forces of 4Kg are also shown. \*\*A measure of force and can be converted to Newtons. † Many claims are made about how little force is required to eject tips from some special low force pipettors; some as low as 0.6Kg however, these claims could not be confirmed in actual use with a calibrated force gauge.

Study results are on file, please contact us to request a copy of the complete study.

# LIQUID HANDLING

## Premier™ Low Force Pipet Tips for all popular pipettors



### Labcon Pipet Tips with Low Mounting and Ejection Force

These ultimate tips feature a uniquely thin and flexible top that conforms to the pipet barrel unlike any other tips. They also include a non-beveled point that is so precise you can easily expel the tiniest amount of sample. The mounting port is beveled to ensure that multichannel pipettes are easy to mount. In clear 100% polypropylene. Tips and racks are autoclavable.



Flexible top seals easier.

### Certified Non-Pyrogenic



TO FIND OUT WHICH TIPS FIT YOUR PIPETTORS SEE PAGES 27-35

Tips are actual size

See page 15 for definitions of alphabetical symbols that appear next to tip photos.

#### 1. 30 µl with Flextop™ and UltraFine™ Point

Ht: 1.500"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1016-960	96 Rack	960		9,600
1016-965	96 Rack	960	✓	9,600
1016-290-020	Pagoda Express Refill	1344		13,440
1016-800	Loose pack tips	1000		10,000

#### 2. 200 µl with Flextop™ and UltraFine™ Point

Ht: 1.955"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1017-960	96 Rack	576		9,600
1017-965	96 Rack	576	✓	9,600
1017-290	Pagoda Express Refill	960		9,600
1017-800	Loose pack tips	1000		10,000
1017-260	Eclipse Refill	960		9,600

#### 3. 300 µl with Flextop™ and UltraFine™ Point

Ht: 2.800"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1014-960	96 Rack	576		4,608
1014-965	96 Rack	576	✓	4,608
1014-800	Loose pack tips	1000		10,000
1014-260	Eclipse Refill	576		5,760

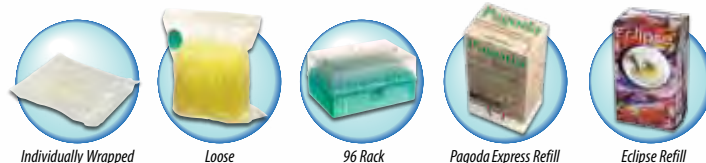
These tips have a very fine end point that fits into small micro tubes and deep well plates. Extra length gives you more head room above your sample so you don't have to worry about contaminating the pipet barrel. The thin flexible top seals onto more pipets but ejects easily. Fits most 1000 µl pipettes. Clear 100% polypropylene. Tips and racks are autoclavable.

#### 4. 100-1250 µl Extended tips with Flextop™ and UltraFine™ Point

Ht: 3.500"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1045-960	96 Rack	576		4,608
1045-965	96 Rack	576	✓	4,608
1045-290-020	Pagoda Express Refill	576		5,760
1045-800	Loose pack tips	1000		10,000
1045-165	Individually Wrapped	200	✓	2,000
1045-260	Eclipse Refill	480		4,800

### Packaging Options



# LIQUID HANDLING

## Pagoda® Pipet Tip Refilling System

The Pagoda and Pagoda Plus systems from Labcon let you reload pipet tip racks with quality Labcon tips in a fraction of the time it takes you to reload by hand. You not only save time, you save cost and our environment by eliminating the need to throw away tip racks. And since you can refill racks without touching the tips you won't expose your tips to contamination like other refilling systems.

Not only is the Pagoda simple to use, it greatly reduces your pipet tip waste. There are more styles of tips available in Pagoda refills than any other refilling system in the world. Why not give yourself a break and help the environment today with the Pagoda and Pagoda Plus systems.

- 90% less waste than pre-racked tips
- 16 tip styles for all popular pipettors
- Reusable loader cuts up to 5 times the waste of hand refilling systems
- Hands or gloved hands never touch the tips
- RNase, DNase, endotoxin free certified in every lot
- Color coded refill platforms

**Pagoda keeps tips clean, unlike other systems and uses up to 5x less plastic...**



Pagoda for 0.1 - 250µL tips



Pagoda Plus for 0.1 - 1250µL tips



Patented tip platform locking



Color coded tip platforms



...up to 5x as much waste



...up to 2x as much waste



Pagoda Refills have less waste

# LIQUID HANDLING

## Pagoda® Pipet Tip Refilling System



Pagoda Plus, available in blue, red or yellow

### Pagoda® Loaders

Pagoda Loaders work with Labcon pipet tips from 0.1-10 µl up to 250 µl. Refillable racks are required for loader and are sold separately. Pagoda Loaders work with racks sold below, except racks for 100-1250 µl tips.

Item	Package	Qty/Pk	Qty/Cs
9015-110	Pagoda Loader, Blue	1	1

### Pagoda® Plus Loaders

Pagoda Plus Loaders work with any size Labcon pipet tip from 0.1-10µl up to 1250µl. Refillable racks are required for loader and are sold separately. Pagoda Plus Loaders work with any rack sold below.

Item	Package	Qty/Pk	Qty/Cs
9018-110-002	Pagoda Loader, Yellow	1	1
9018-110-004	Pagoda Loader, Red	1	1
9018-110-007	Pagoda Loader, Blue	1	1

### Assorted Color Refillable Racks

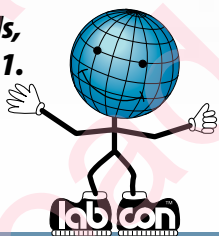
Includes yellow, white, blue, green and purple in the same package.

Item	Package	Qty/Pk	Qty/Cs
1280-969	Racks for 1-250µL Tips	10	100
1279-969	Racks for 1-1250µL Tips	6	48



Color coordinate and organize your tips with assorted color refillable racks.

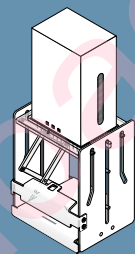
For Pagoda Refills, see pages 9, 16-21.



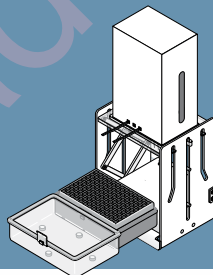
### Refillable Racks for Pagoda®/Pagoda® Plus Loaders

Hinged, refillable, autoclavable racks for refills. Pagoda loaders work with Labcon pipet tips from 0.1-10 µl up to 250µl. Pagoda Plus Loaders work with Labcon pipet tips from 0.1-10 µl up to 1250 µl tips.

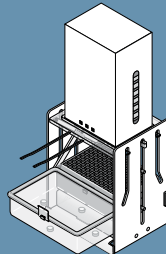
Item	Package	Qty/Pk	Qty/Cs
1289-960	Racks for 10µL Tips	12	120
1280-960	Racks for 1-250µL Tips	10	100
1279-960	Racks for 100-1250µL Tips	6	48



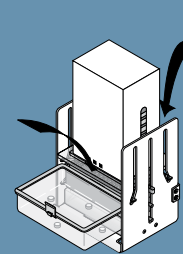
Place refill stack onto loader....



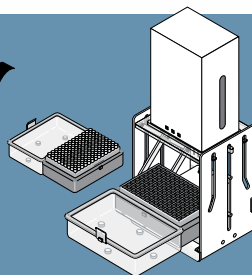
Insert empty rack into loader....



Pull out red safety tabs...



Push down on sides of loader...



Remove filled rack and insert next empty rack into loader.

# LIQUID HANDLING

## Eclipse™ Pipet Tip Refill System

### The Eclipse™ System

A revolutionary *New* pipet tip refill system redefines *Green*

- Simple to use
- Tips to fit your pipettors
- Rnase/Dnase-free and Non pyrogenic
- Anti-wobble tip mounting
- 18 pipet tip styles
- Reclosable package
- Tips made from pure resins
- Refills existing tip racks
- Compact easy-store package
- Packaging made from renewable materials



### Using Eclipse to refill a pipet tip rack is simple and easy



Revolutionary compostable components only from Labcon

The Eclipse Pipet Tip Refill system from Labcon goes far beyond other reload systems to bring a complete refilling solution to your lab. With a simple lift, place, and snap, you can refill Labcon and other brands\* of pipet tip racks with 18 different styles of tips. Eclipse refill tips are lab certified Rnase/Dnase-and Non-Pyrogenic. Sterile refills use a validated sterile process and include an expiration date on every pack. The Eclipse is a revolution in pipet tip refills.

Far beyond simple recycle coding, the patent pending Eclipse is a completely designed system with a Low Carbon footprint that includes the first ever use of bio-plastic (non-petroleum) compostable resin in pipet tip refills. And Eclipse's small footprint extends to the package, with a reclosable box that helps you maximize storage space in crowded labs.



1. Open the Eclipse and grasp transfer top. Lift straight up slowly.



2. Align transfer top over refillable rack and place onto rack.

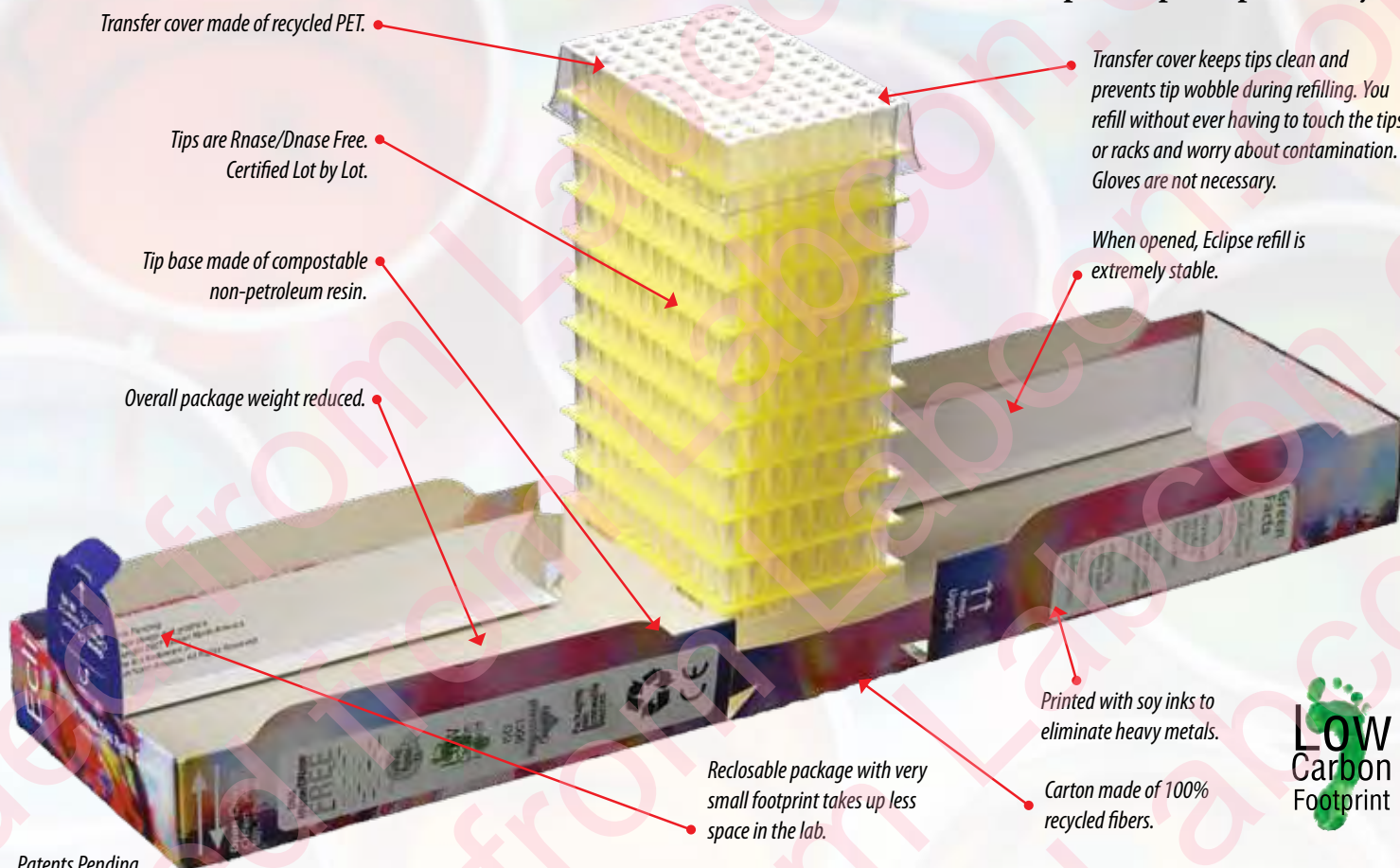


3. Push down onto transfer top to release refill plate. Return transfer top to Eclipse refill stack.

\*The patented hold down feature available on Labcon racks is not available in other racks. Not all racks will work with the Labcon refill system, check your racks for compatibility.

# LIQUID HANDLING

## Eclipse™ Pipet Tip Refill System



Transfer cover made of recycled PET.

Tips are Rnase/Dnase Free.  
Certified Lot by Lot.

Tip base made of compostable  
non-petroleum resin.

Overall package weight reduced.

Transfer cover keeps tips clean and prevents tip wobble during refilling. You refill without ever having to touch the tips or racks and worry about contamination. Gloves are not necessary.

When opened, Eclipse refill is extremely stable.

Printed with soy inks to eliminate heavy metals.

Carton made of 100% recycled fibers.

Reclosable package with very small footprint takes up less space in the lab.



Patents Pending

### Exclusive features only from Eclipse™ refills

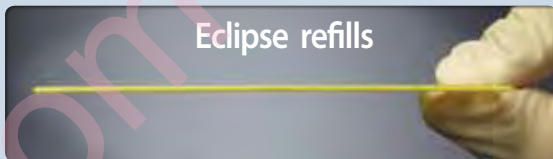
#### Quality

Every lot of Eclipse refills are tested for Rnase/Dnase (Nuclease), Human DNA, and Endotoxins and are certified free of contamination and non pyrogenic.

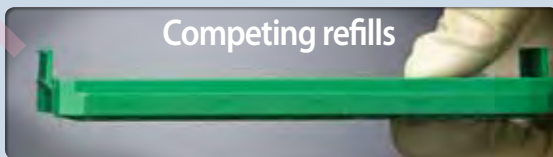
#### Thin refill inserts

Eclipse uses thin refill inserts made from 80% less material than competing refill systems. And the transfer top keeps your tips from wobbling during refilling. So you don't need to use gloves to refill.

Eclipse refills



Competing refills



#### Refills many rack brands

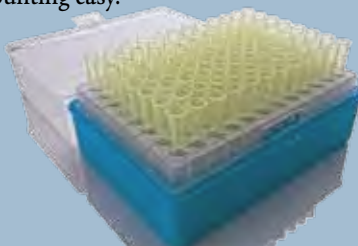
Refills many brands\* of pipet tip racks. Not only Labcon racks.



\*The patented hold down feature available on Labcon racks is not available in other racks. Not all racks will work with the Labcon refill system, check your racks for compatibility.

#### Anti-wobble

Fits new pipet tip racks that include a special anti-wobble feature making tip mounting easy.



#### Bio-Plastic

Components made from non-petroleum compostable bio-plastic resin.



# LIQUID HANDLING

## Eclipse™ Pipet Tip Refill System

### Eclipse refill packaging compared to popular refill systems for 960 tips



**0.45kg**

**39.8% packaging, 60.2% usable product**



95% renewable materials. Compostable tip base from organic non-petroleum resin. Soy based vegetable inks.

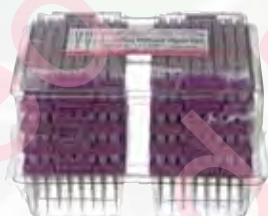


**0.84kg**

**68.1% packaging, 31.9% usable product**



0.5% renewable materials, 99.5% non renewable petroleum based resin.



**0.65kg**

**59.0% packaging, † 41.0% usable product**



0.2% renewable materials, 99.8% non renewable petroleum based resin.



**0.51kg**

**47.3% packaging, † 52.7% usable product**



0.5% renewable materials, 99.5% non renewable petroleum based resin.

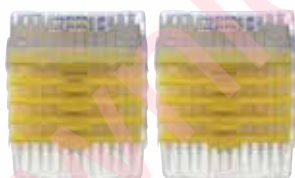


**0.73kg**

**63.4% packaging, † 36.6% usable product**



0.5% renewable materials, 99.5% non renewable petroleum based resin.



**0.56kg**

**52.0% packaging, † 48.0% usable product**



100% non renewable petroleum based resin.

†This product is supplied in an extra carton that was not added to packaging totals. 0.27 kg was used as a constant value for the pipet tip portion of these products. Trademarks are of respective suppliers shown. Results are from purchased market samples.



## Classic™ Pipet Tips

Our Classic™ pipet tips include as standard many features available from other suppliers only as special upgrades. All the Classic tips we make are made of high quality 100% pure virgin medical grade polypropylene so you won't find recycled plastics in our tips. We pre-test the resin to ensure no extractables are present. Every lot is lab tested and certified free of detectable Nuclease (Rnase/Dnase), Endotoxin (pyrogen) contamination and certified to U.S.P. results. Resins are pre-tested for metal contamination. Certificates are on file with us by lot number for all test results and available online at [www.labcon.com](http://www.labcon.com).

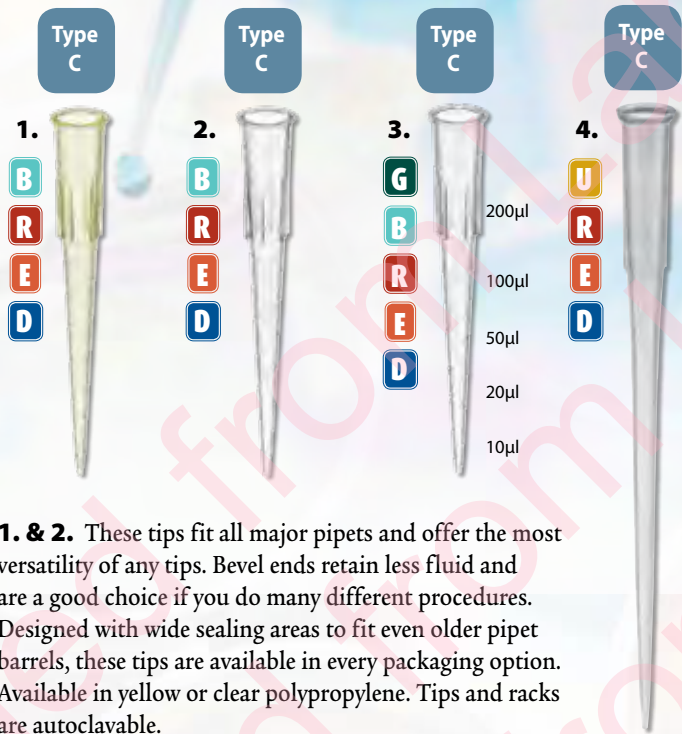
The list below notes the special features of Classic™ and Premier™ tips shown on pages 9 and 16-22. Testing certification information is shown on pages 4-5. Fit charts are shown on pages 27-33.

- S** Silicone entrained in the polypropylene formula prelubricates these tips for use with sticky DNA or other viscous materials. Allows you to set your equipment to screen out silicone.
- U** Pipet tips with Ultrafine point feature a thin flexible section at the end that is non beveled and very flexible. This helps you dispense the last tiny amount of sample from the tip.
- P** Protease Free Low Binding pipet tips are made from a proprietary modified polypropylene resin. The resin helps increase the contact angle of fluids and lets you dispense the maximum amount of sticky DNA molecules. They are up to 10 times better at dispensing viscous samples than ordinary tips. Lot tested to be free of protease contaminants and Human DNA.
- B** Pipet tips that feature beveled points are designed to retain less fluid and are a good choice for a multitude of procedures.
- D** These tips have been lot tested for the presence of Human DNA and found free of detectable levels.
- R** These tips have been lot tested for the presence of detectable Nuclease (Rnase/Dnase) and found to be free of detectable levels.
- G** These tips have graduations on the outside of the tip to help you visually confirm the pipettor draw during use.
- E** Our Premier™ and Classic™ tips have been lot tested for the presence of endotoxins (pyrogens) and found to have levels below detectable limits.
- W** Extra wide opening allows you to pipet macrophages or sticky whole cells. Beveled end helps eliminate carry over from viscous solutions. Orifice is 0.0057".
- L** These tips have a unique design that allows them to mount and eject from most pipettors with forces that help eliminate the potential for repetitive strain injuries.



# LIQUID HANDLING

## Classic™ 200µL Pipet Tips



**1. & 2.** These tips fit all major pipets and offer the most versatility of any tips. Bevel ends retain less fluid and are a good choice if you do many different procedures. Designed with wide sealing areas to fit even older pipet barrels, these tips are available in every packaging option. Available in yellow or clear polypropylene. Tips and racks are autoclavable.

### 1. 200µl Bevel Point™ pipet tips, Yellow Ht: 1.955"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1030-960	96 Rack	960		9,600
1030-965	96 Rack	960	✓	9,600
1030-990	96 Stack Rack	960		9,600
1030-990-028	96 Stack Rack Refill	960		9,600
1030-790	192 Rack	960		9,600
1030-795	192 Rack	960	✓	9,600
1030-700	192 Stack Rack	960		9,600
1030-700-028	192 Stack Rack Refill	960		4,800
1030-800	Loose pack tips	1000		10,000
1030-900	Bulk Tips	30000		30,000
1030-165	Individually Wrapped	200	✓	2,000
1030-290	Pagoda Refill	960		9,600
1030-290-020	Pagoda Express Refill	960		9,600
1030-295-020	Pagoda Express Refill	960	✓	9,600
1030-260	Eclipse Refill	960		9,600

### 2. 200µl Bevel Point™ pipet tips, Clear Ht: 1.955"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1060-960	96 Rack	960		9,600
1060-965	96 Rack	960	✓	9,600
1060-990	96 Stack Rack	960		9,600
1060-790	192 Rack	960		9,600
1060-795	192 Rack	960	✓	9,600
1060-800	Loose pack tips	1000		10,000
1060-165	Individually Wrapped	200	✓	2,000
1060-260	Eclipse Refill	960		9,600

## Tips for 200µl Pipets

**3.** These tips fit all major pipets and have graduations on the outside of the tip to help visually confirm pipette settings. Smooth beveled ends retain less fluid and are a good choice if you do many different procedures. Designed with wide sealing areas to fit even older pipette barrels, these tips are available in every packaging option. Tips and racks are autoclavable.

### 3. Clear Graduated 200µl Bevel Point™ pipet tips Ht: 1.955"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1093-960	96 Rack	960		9,600
1093-965	96 Rack	960	✓	9,600
1093-990	96 Stack Rack	960		9,600
1093-990-028	96 Stack Rack Refill	960		9,600
1093-790	192 Rack	960		9,600
1093-795	192 Rack	960	✓	9,600
1093-700	192 Stack Rack	960		9,600
1093-700-028	192 Stack Rack Refill	960		4,800
1093-800	Loose pack tips	1000		10,000
1093-900	Bulk Tips	30000		30,000
1093-165	Individually Wrapped	200	✓	2,000
1093-290	Pagoda Refill	960		9,600
1093-290-020	Pagoda Express Refill	960		9,600
1093-295-020	Pagoda Express Refill	960	✓	9,600
1093-260	Eclipse Refill	960		9,600

**4.** These high-quality, extra-long tips feature a uniquely thin and flexible top that conforms to the pipettor barrel unlike any other tips, forming a tight seal with minimal ejection force. They include a non beveled point that is extremely precise so you can easily dispense the smallest sample. In clear 100% polypropylene. Tips and racks are autoclavable.

### 4. 200µl Extended tips with Flextop™ and UltraFine™ Point Ht: 3.300"

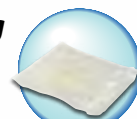
Item	Package	Qty/Pk	Sterile	Qty/Cs
1012-960	96 Rack	576		4,608
1012-965	96 Rack	576	✓	4,608
1012-800	Loose pack tips	1000		10,000

TO FIND OUT WHICH TIPS FIT YOUR PIPETTOR SEE PAGES 27-33

Tips are actual size



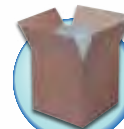
## Packaging Options



Individually Wrapped



Loose



Bulk



96 Rack & Stack



192 Rack & Stack

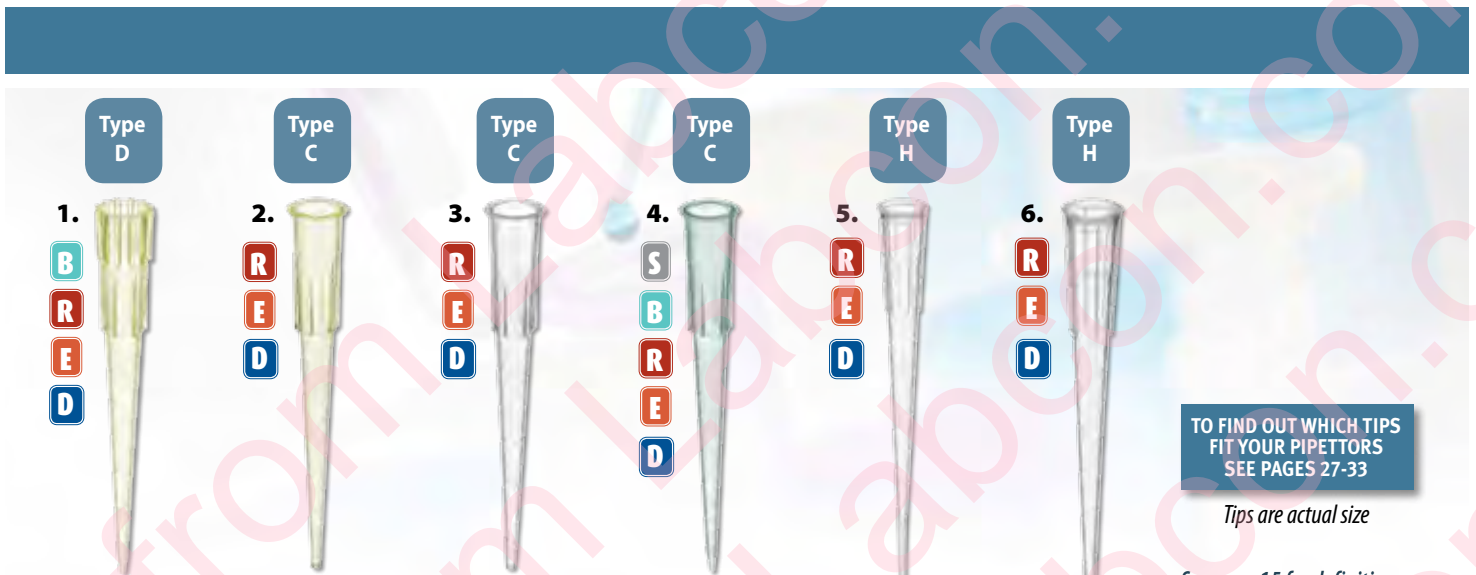


Pagoda Express Refill



Eclipse Refill

See page 15 for definitions of alphabetical symbols that appear next to tip photos.



TO FIND OUT WHICH TIPS FIT YOUR PIPETTORS SEE PAGES 27-33

Tips are actual size

See page 15 for definitions of alphabetical symbols that appear next to tip photos.

**1.** Designed to fit Eppendorf, Brinkmann Instruments, and Brand pipettors. Ribbed top ensures solid ejection from these pipettor models. Beveled end retains less fluid and is a good choice if you do many different procedures. Designed with wide sealing areas to fit even older pipettor barrels, these tips are available in every packaging option. Available in yellow polypropylene. Tips and racks are autoclavable.

**1. 100µl Bevel Point™ pipet tips for Eppendorf pipettors, Yellow** Ht: 1.955"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1032-960	96 Rack	960		9,600
1032-965	96 Rack	960	✓	9,600
1032-790	192 Rack	960		9,600
1032-795	192 Rack	960	✓	9,600
1032-700	192 Stack Rack	960		9,600
1032-800	Loose pack tips	1000		10,000
1032-290	Pagoda Refill	960		9,600
1032-260	Eclipse Refill	960		9,600

**2. & 3.** These tips fit all major pipettors. Perfect when a traditional blunt cut end style is desirable. Designed with wide sealing areas to fit even older pipettor barrels, these tips are available in racks and bulk. Yellow or clear polypropylene. Tips and racks are autoclavable.

**2. 200µl Traditional Style non-beveled pipet tips, Yellow** Ht: 1.955"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1031-960	96 Rack	960		9,600
1031-965	96 Rack	960	✓	9,600
1031-800	Loose pack tips	1000		10,000
1031-290-020	Pagoda Express Refill	960		9,600

**3. 200µl Traditional Style non-beveled pipet tips, Clear** Ht: 1.955"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1071-960	96 Rack	960		9,600
1071-965	96 Rack	960	✓	9,600
1071-800	Loose pack tips	1000		10,000
1071-290-020	Pagoda Express Refill	960		9,600

**4.** Silicone in the polypropylene formulation prelubricates these tips for use with sticky DNA or other viscous materials. Allows you to set your equipment to screen out the presence of silicone. Designed with wide sealing areas to fit even older pipettor barrels. Green polypropylene. Tips and racks are autoclavable.

**4. Siliconized 200µl Bevel Point™ pipet tips** Ht: 1.955"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1062-960	96 Rack	960		9,600
1062-965	96 Rack	960	✓	9,600
1062-800	Loose pack tips	1000		10,000

**5. & 6.** These tips fit all major pipettors and include long thin capillary sections for use in nuclease acid sequencing. The thin capillary fits between gel plates to allow you to accurately fill in between the teeth of the gel comb. Available with a 14 mm capillary or a 30 mm capillary. Designed with wide sealing areas to fit even older pipettor barrels. In clear polypropylene. Tips and racks are autoclavable.

**5. 200µl Capillary Tips for gel-loading, 30 mm** Ht: 3.250"

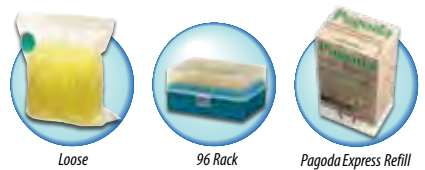
Item	Package	Qty/Pk	Sterile	Qty/Cs
1034-960	96 Rack	576		4,608
1034-965	96 Rack	576	✓	4,608
1034-800	Loose pack tips	1000		10,000

**6. 200µl Capillary Tips for gel-loading, 14 mm** Ht: 2.544"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1035-960	96 Rack	576		4,608
1035-965	96 Rack	576	✓	4,608
1035-800	Loose pack tips	1000		10,000

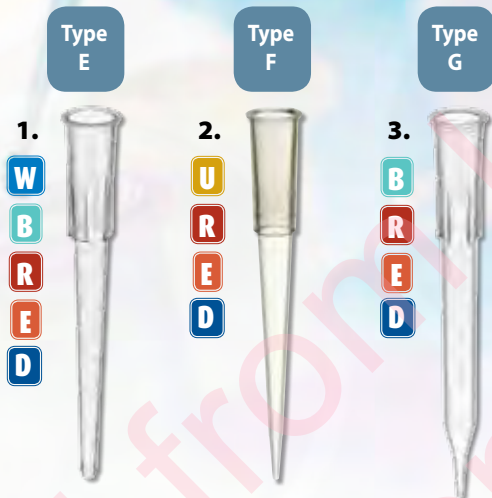


**Packaging Options**



# LIQUID HANDLING

## Classic™ Tips for 200 & 300µL Pipets



See page 15 for definitions of alphabetical symbols that appear next to tip photos.

TO FIND OUT WHICH TIPS FIT YOUR PIPETORS SEE PAGES 27-33

Tips are actual size

**1.** Extra-wide opening allows you to use these tips to pipet macrophages or sticky DNA materials. Bevel helps eliminate carry-over from viscous solutions. Designed with wide sealing areas to fit even older pipettor barrels, these tips are available in every packaging option. Available in clear polypropylene. Tips and racks are autoclavable.

### 1. Wide Orifice 200µl Bevel Point™ pipet tips

Ht: 1.955"  
Orifice: 0.057"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1026-960	96 Rack	960		9,600
1026-965	96 Rack	960	✓	9,600
1026-800	Loose pack tips	1000		10,000
1026-290	Pagoda Express	960		9,600
1026-260	Eclipse Refill	960		9,600

**2.** These tips have a thinner wall that is very flexible and a fine non-beveled point. They help you wipe the very last bit of sample from your pipettor. Designed with wide sealing areas to fit most 200 or 250µL pipettor barrels. Clear polypropylene. Tips and racks are autoclavable.

### 2. 250µl pipet tips with UltraFine™ point

Ht: 2.050"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1099-960	96 Rack	960		9,600
1099-965	96 Rack	960	✓	9,600
1099-290-020	Pagoda Express	960		9,600
1099-800	Loose pack tips	1000		10,000
1099-165	Individually Wrapped	200	✓	2,000
1099-260	Eclipse Refill	960		9,600

**3.** These tips feature a short fine tip point to help you wipe the very last bit of sample from your tip. Designed with wide sealing areas to fit most 300µl pipettor barrels. Clear polypropylene. Tips and racks are autoclavable.

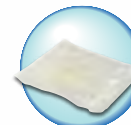
### 3. 300µl pipet tips with Bevel Point™

Ht: 2.050"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1039-960	96 Rack	960		9,600
1039-965	96 Rack	960	✓	9,600
1039-790	192 Rack	960		9,600
1039-795	192 Rack	960	✓	9,600
1039-800	Loose pack tips	1000		10,000
1039-165	Individually Wrapped	200		2,000



### Packaging Options



Individually Wrapped



Loose



96 Rack



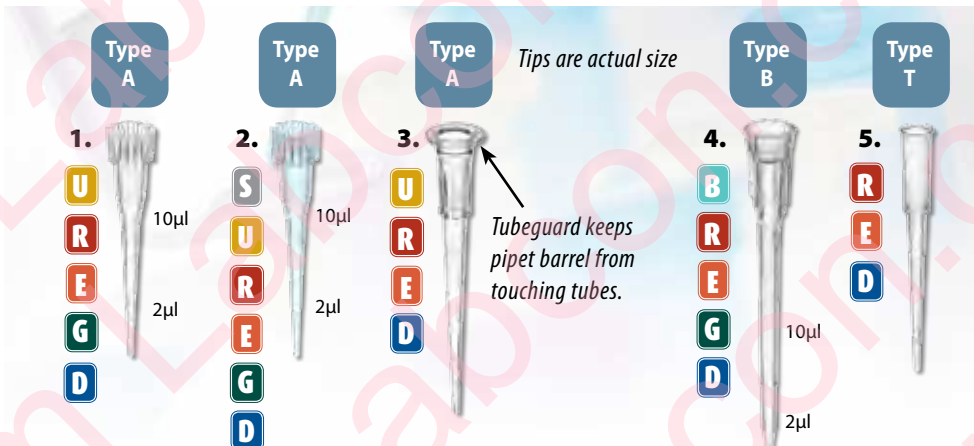
Pagoda Express Refill



Eclipse Refill

Our pipet tips for small volumes are molded in precision diamond polished molds from 100% medical grade polypropylene. Packaged using automated techniques, every lot of these pipet tips has been tested and found to be free of detectable Rnase/Dnase (Nuclease), Human DNA, and are non-pyrogenic.

See page 15 for definitions of alphabetical symbols that appear next to tip photos.



**1.** These tips feature a fine thin capillary section at the end that is non-beveled and very flexible. This helps you dispense the last small amount of sample from your tip. Tip also has a chamfered top entry that makes it easier to mount these tips onto different brands of pipets. Polypropylene. Graduated to show 2µl and 10µl. Tips and racks are autoclavable.

**1. 10µl pipet tips with UltraFine™ tip**  
Ht: 1.237"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1038-960	96 Rack	1152		11,520
1038-965	96 Rack	1152	✓	11,520
1038-800	Loose pack tips	1000		10,000
1038-900	Bulk Tips	30000		30,000
1038-165	Individually Wrapped	200	✓	2,000
1038-290	Pagoda Refill	1152		11,520
1038-290-020	Pagoda Express Refill	1152		11,520
1038-295-020	Pagoda Express Refill	1152	✓	11,520
1038-260	Eclipse Refill	1248		12,480

**2.** Silicone in the polypropylene formulation prelubricates these tips for use with sticky DNA or other viscous materials. Allows you to set your equipment to screen out the presence of silicone. These tips have a thin capillary section at the end that is non-beveled and very flexible. This helps you dispense the very last bit of sample from your tip. Includes a chamfered top mounting area that makes it easier to mount these tips onto many different pipettor brands. Graduated to show 2µl and 10µl. Green polypropylene. Tips and racks are autoclavable.

**2. Siliconized 10µl pipet tips with UltraFine™ tip**  
Ht: 1.237"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1061-960	96 Rack	1152		11,520
1061-965	96 Rack	1152	✓	11,520
1061-800	Loose pack tips	1000		10,000

**3.** These tips are longer than most 10µl tips to allow you to reach down into 0.65 ml tubes. But unlike other extended tips, they are not so long that they introduce inaccuracy. The top mounting port features a solid ring that prevents the pipettor barrel from touching the sides of micro tubes. UltraFine™ point. In clear 100% polypropylene. Tips and racks are autoclavable. Fits most popular 10µl pipettors.

**3. 10µl pipet tips with Extended Length and Pipettor protection**  
Ht: 1.500"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1036-960	96 Rack	960		9,600
1036-965	96 Rack	960	✓	9,600
1036-290-020	Pagoda Express Refill	1344		13,440
1036-800	Loose pack tips	1000		10,000
1036-260	Eclipse Refill	1344		13,440

**4.** These tips have a thin bevel section at the end that is very flexible. This helps you dispense the very last bit of sample from your tip. Clear polypropylene. Tips and racks are autoclavable. Graduated to show 2µl and 10µl.

**4. 10µl pipet tips with Bevel Point™** Ht: 1.765"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1033-960	96 Rack	960		9,600
1033-965	96 Rack	960	✓	9,600
1033-800	Loose pack tips	1000		10,000

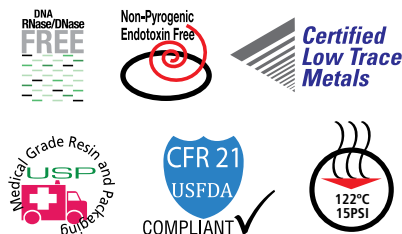
**5.** These tips are made to fit 16 channel pipettors for filling 384 well plates. Very small but very straight tips are supplied in special heavy racks. With UltraFine™ point. In clear 100% polypropylene. Tips and racks are autoclavable.

**5. 1-50µl pipet tips for 16 Channel Finnpiptette pipets** Ht: 1.295"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1007-690	384 Rack	3840		19,200
1007-695	384 Rack	3840	✓	19,200

TO FIND OUT WHICH TIPS FIT YOUR PIPETTOR SEE PAGES 27-33

Tips are actual size



**Packaging Options**



# LIQUID HANDLING

## Classic™ Pipet Tips for Most Larger Volume Pipettors

Labcon pipet tips for larger volume pipettors are precision molded in diamond polished molds from 100% medical grade polypropylene. These tips have been packaged using automated techniques. Every production lot of these pipet tips has been tested and found to be free of detectable nuclease contamination.

**1.** These tips have a fine beveled dispensing end that fits into 0.65µl micro tubes. Longer than most other 1000µl tips. In blue polypropylene. Tips and racks are autoclavable.

### 1. 100-1000µl UltraFine™ pipet tips for most 1000µl pipettors *Ht:2.990"*

Item	Package	Qty/Pk	Sterile	Qty/Cs
1041-960	96 Rack	576		4,608
1041-965	96 Rack	576	✓	4,608
1041-700	96 Stack Rack	480		4,800
1041-800	Loose pack tips	1000		10,000

**2.** These tips have a fine end point that fits into 0.65 ml micro tubes. Graduations allow a visual check of pipetting accuracy. Clear polypropylene. Tips and racks are autoclavable.

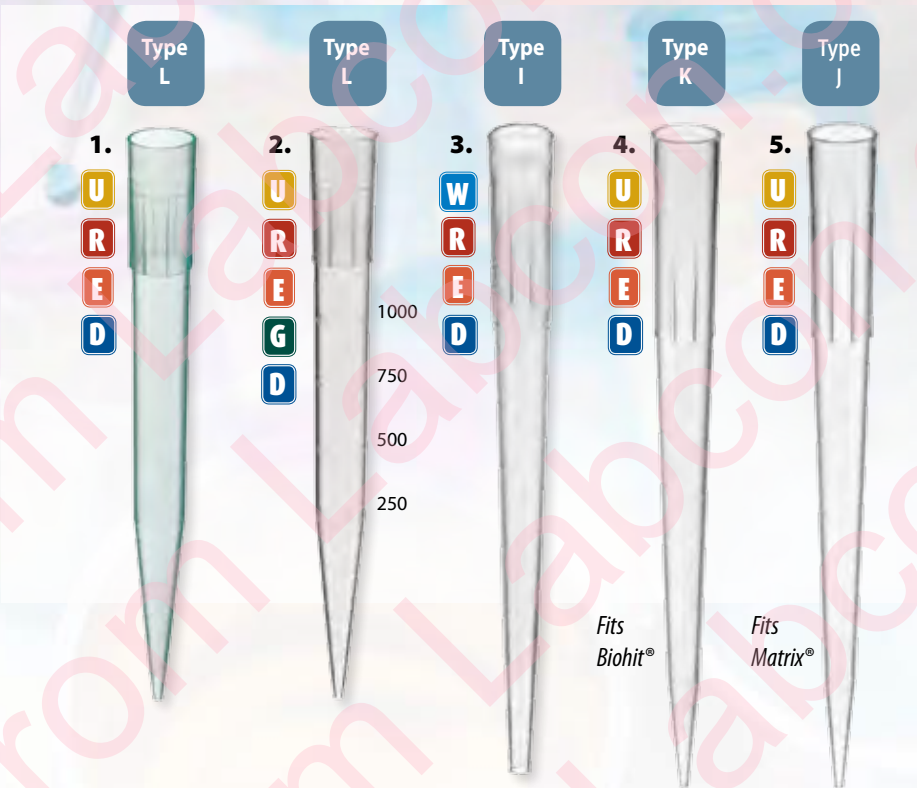
### 2. Graduated 100-1000µl UltraFine™ pipet tips fit most 1000µl pipettors *Ht:2.990"*

Item	Package	Qty/Pk	Sterile	Qty/Cs
1046-960	96 Rack	576		4,608
1046-965	96 Rack	576	✓	4,608
1046-700	96 Stack Rack	480		4,800
1046-800	Loose pack tips	1000		10,000

**3.** Extra-wide opening allows you to use these tips to pipette macrophages or sticky DNA materials. Designed with flexible tops to fit even older pipettor barrels. Available in clear polypropylene. Tips and racks are autoclavable.

### 3. 100-1250µl Wide Orifice tips for most 100-1250µl pipettors *Ht:3.500"*

Item	Package	Qty/Pk	Sterile	Qty/Cs
1042-960	96 Rack	576		4,608
1042-965	96 Rack	576	✓	4,608
1042-290	Pagoda Express	576		5,760
1042-800	Loose pack tips	1000		10,000
1042-260	Eclipse Refill	480		4,800



**4.** These tips have a fine end point that fits into small micro tubes and deep well plates. Extra length gives you more head room above the sample so you don't have to worry about contaminating the pipettor barrel. Clear polypropylene. Tips and racks are autoclavable.

### 4. 100-1200 µl pipet tips with UltraFine point for Biohit® pipettors

*Ht:3.500"*  
*Max Fill: 100-1200 µL*

Item	Package	Qty/Pk	Sterile	Qty/Cs
1048-960	96 Rack	576		4,608
1048-965	96 Rack	576	✓	4,608
1048-800	Loose pack tips	1000		10,000
1048-165	Individually Wrapped	200	✓	2,000

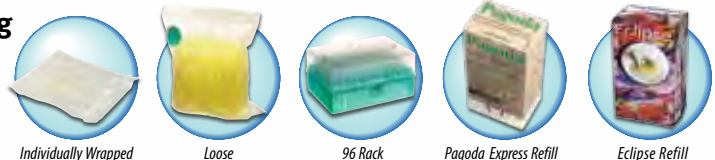
**5.** These tips have a fine end point that fits into small micro tubes and deep well plates. Extra length gives you more head room above the sample so you don't have to worry about contaminating the pipettor barrel. Clear polypropylene. Tips and racks are autoclavable.

### 5. 100-1250 µl pipet tips with UltraFine point, extra length for Matrix® Impact 2® pipettors

*Ht:3.500"*  
*Max Fill: 100-1250 µL*

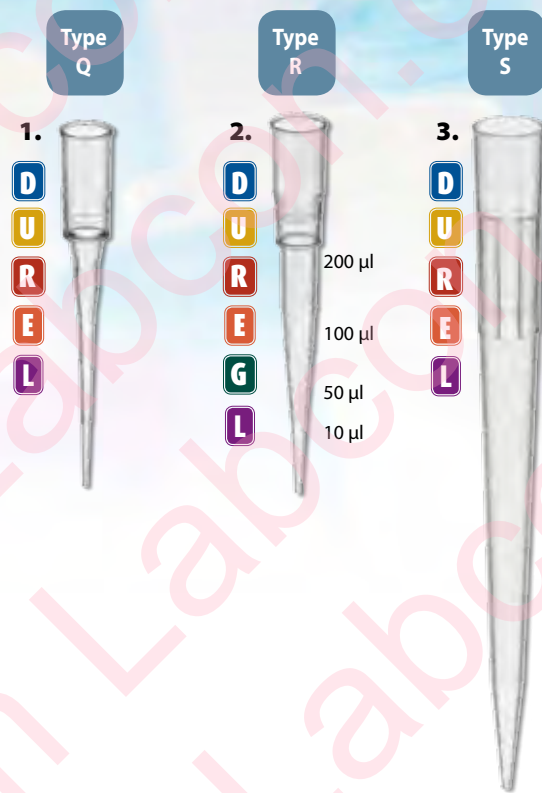
Item	Package	Qty/Pk	Sterile	Qty/Cs
1047-960	96 Rack	576		4,608
1047-965	96 Rack	576	✓	4,608
1047-800	Loose pack tips	1000		10,000

### Packaging Options



These tips fit the Lite Touch™ pipettors from Rainin®. Made of clear pretested polypropylene resin and lot certified pure and free of human DNA, DNase, RNase, Endotoxins and Trace Metals. These tips bring the higher quality and performance of Labcon tips to ergonomic pipetting.

Labcon tips for LTS pipettors are made from special flexible resins. For easiest ejection apply less than 12Kg of force when mounting. Do not force tips onto the pipettor barrel with excessive force.



### 1. 0.1-20 µl tips for L-2, L-10, L-20, RL-2, RL-10, RL-20 pipettors

Ht: 1.900"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1011-960	96 Rack	960		9,600
1011-965	96 Rack	960	✓	9,600
1011-290	Pagoda Express	1056		10,560
1011-800	Loose pack tips	1000		10,000
1011-260	Eclipse Refill	1056		10,560

### 2. 0.5-250 µl tips for L-100, L-200, RL-100, RL-200 pipettors

Ht: 2.020"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1018-960	96 Rack	960		9,600
1018-965	96 Rack	960	✓	9,600
1018-290	Pagoda Express	960		9,600
1018-800	Loose pack tips	1000		10,000
1018-260	Eclipse Refill	960		9,600

### 3. 100-1000 µl tips for L-1000 and RL-1000 pipettors

Ht: 3.500"

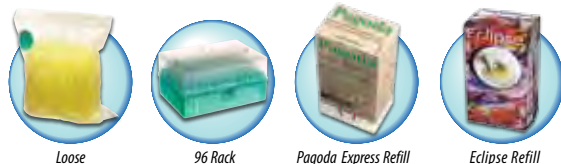
Item	Package	Qty/Pk	Sterile	Qty/Cs
1019-960	96 Rack	576		4,608
1019-965	96 Rack	576	✓	4,608
1019-290	Pagoda Express	576		5,760
1019-800	Loose pack tips	1000		10,000
1019-260	Eclipse Refill	480		4,800

TO FIND OUT WHICH TIPS FIT YOUR PIPETTORS SEE PAGES 27-33

Tips are actual size

See page 15 for definitions of alphabetical symbols that appear next to tip photos.

### Packaging Options



# LIQUID HANDLING

## Classic™ Macro Volume Pipet Tips

These tips are designed to fit macro volume pipettors. 100% polypropylene. Autoclavable. In resealable bags.

See page 15 for definitions of alphabetical symbols that appear next to tip photos.

1. Clear polypropylene. Graduated. Tips are autoclavable.

**1-5mL Graduated Macro pipet tips for Biohit® and Eppendorf® Pipettors.**

Ht: 4.844"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1027-860	Loose Pack Tips	250		2,500

2. Clear polypropylene. Graduated. Tips are autoclavable.

**1-5mL Graduated Macro pipet tips for Gilson® and Rainin® Macro Pipettors.**

Ht: 4.844"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1025-860	Loose Pack Tips	250		2,500

3. Designed to work with most popular large volume pipettors. Clear polypropylene. Graduated. Tips are autoclavable.

**1-5mL Macro pipet tips for Macro Pipettors.**

Ht: 5.680" Max fill: 1-5 ml

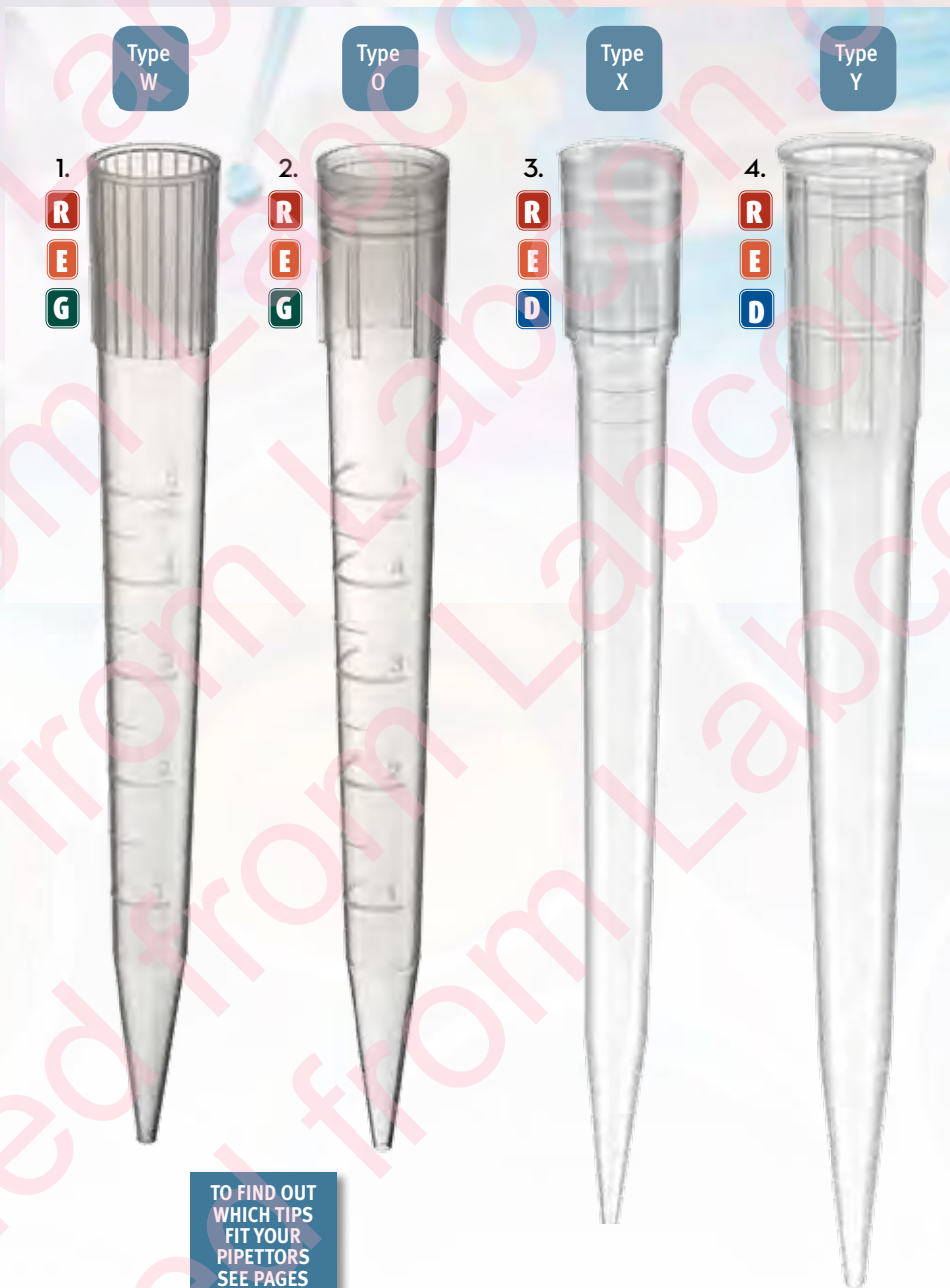
Item	Package	Qty/Pk	Sterile	Qty/Cs
1028-860	Loose Pack Tips	250		2,500

4. Clear polypropylene. Tips are autoclavable.

**5-10mL pipet tips for Macro Volume Pipettors.**

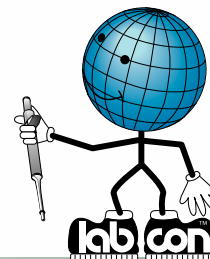
Ht: 6.130" Max fill: 5-10 ml

Item	Package	Qty/Pk	Sterile	Qty/Cs
1029-860	Loose Pack Tips	250		2,500



TO FIND OUT WHICH TIPS FIT YOUR PIPETTORS SEE PAGES 27-33

Tips are actual size



Packaging Options



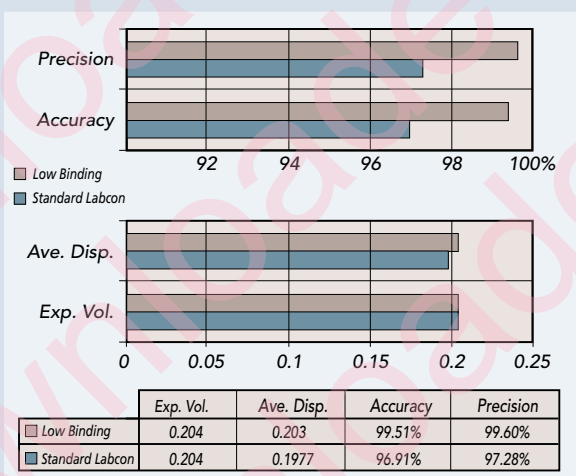
### for Proteomic Research

- Certified Protease Free
- Up to 1000% less surface binding than standard polypropylene tips
- For viscous proteins
- Laboratory tested and developed



Low binding tips from Labcon have a proprietary modified polypropylene surface that limits the adhesion of cells, rDNA, and other viscous materials. Their accuracy and precision is up to 10 times better with viscous samples than standard non-wettable polypropylene. Labcon tips are compliant with international medical standards and are manufactured with an ISO 9001:2008 registered quality system.

These tips were developed in our own laboratory and have found to be ideal for viscous samples. Low binding tips are best suited for pipetting thick or sticky fluids and may not be appropriate for all uses.



This chart shows actual test results using Labcon pipet tips and standard non-wettable polypropylene tips when used with a viscous dye suspension.



Labcon SuperSlik™ low binding tip



Standard non-wettable polypropylene tip

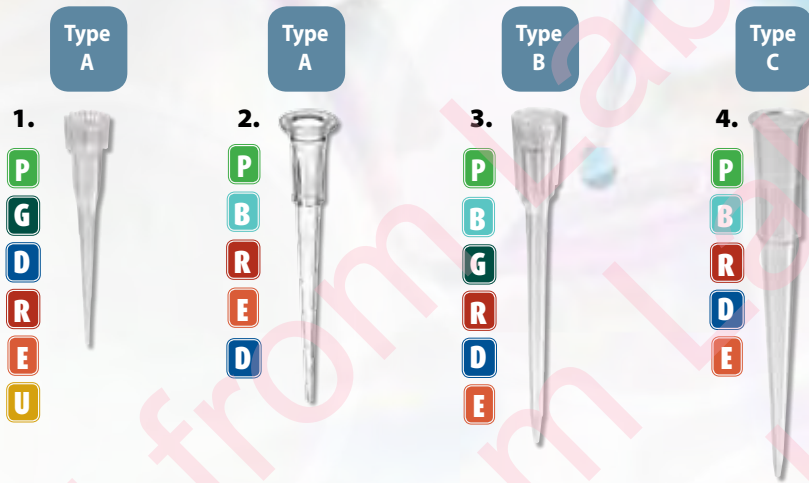
Actual test shows results of 200 µl drawn and then dispensed from Labcon low binding tip, and standard non-wettable tip



# LIQUID HANDLING

## SuperSlik™ Protease Free Pipet Tips with Low Protein Binding Surface

### Certified Protease Free



#### 1. Low Binding 10µl Pipet Tips with UltraFine™ Point

Ht: 1.235"  
Max Fill: 0.1-10µL  
Graduated at 2, 10µL

Item	Package	Qty/Pk	Sterile	Qty/Cs
1161-960	96 Rack	1152		11,520
1161-965	96 Rack	1152	✓	11,520
1161-800	Loose pack tips	1000		10,000

#### 2. Low Binding 10µl Extended Length with TubeGuard™

Ht: 1.500"  
Max Fill: 0.5-10µL

Item	Package	Qty/Pk	Sterile	Qty/Cs
1162-960	96 Rack	960		9,600
1162-965	96 Rack	960	✓	9,600
1162-800	Loose pack tips	1000		10,000

#### 3. Low Binding 10µl Pipet Tips with Bevel Point™

Ht: 1.765"  
Max Fill: 0.5-10µL  
Graduated at 2, 10µL, Eppendorf®

Item	Package	Qty/Pk	Sterile	Qty/Cs
1163-960	96 Rack	960		9,600
1163-965	96 Rack	960	✓	9,600
1163-800	Loose pack tips	1000		10,000

#### 4. Low Binding 200µl Pipet Tips with Bevel Point™

Ht: 1.955"  
Max Fill: 1-200µL

Item	Package	Qty/Pk	Sterile	Qty/Cs
1065-960	96 Rack	960		9,600
1065-965	96 Rack	960	✓	9,600
1065-800	Loose pack tips	1000		10,000
1065-260	Eclipse Refill	960		9,600

TO FIND OUT WHICH TIPS FIT YOUR PIPETTORS SEE PAGES 27-33

Tips are actual size

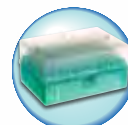
See page 15 for definitions of alphabetical symbols that appear next to tip photos.



#### Packaging Options



Loose



96 Rack

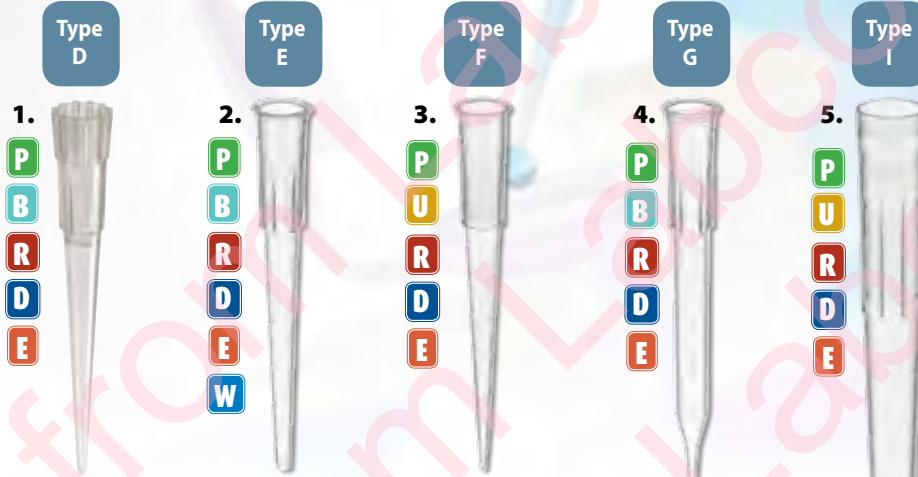


Pagoda Express Refill



Eclipse Refill

### Certified Protease Free



#### 1. Low Binding 100µl Pipet Tips for Eppendorf Pipettors

Ht: 1.955"  
Max Fill: 1-100µL

Item	Package	Qty/Pk	Sterile	Qty/Cs
1167-960	96 Rack	960		9,600
1167-965	96 Rack	960	✓	9,600
1167-800	Loose pack tips	1000		10,000

#### 2. Low Binding 250µl Wide Orifice Pipet Tips for Whole Cells

Ht: 1.955"  
1-200µL, Wide Orifice  
Orifice is 0.057"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1164-960	96 Rack	960		9,600
1164-965	96 Rack	960	✓	9,600
1164-800	Loose pack tips	1000		10,000

#### 3. Low Binding 250µl UltraFine™ Point Pipet Tips

Ht: 1.955"  
1-250µL, Fine

Item	Package	Qty/Pk	Sterile	Qty/Cs
1166-960	96 Rack	960		9,600
1166-965	96 Rack	960	✓	9,600
1166-800	Loose pack tips	1000		10,000
1166-260	Eclipse Refill	960		9,600

#### 4. Low Binding 300µl Pipet Tips with Bevel Point™

Ht: 2.050"  
1-300µL, Fine

Item	Package	Qty/Pk	Sterile	Qty/Cs
1169-960	96 Rack	960		9,600
1169-965	96 Rack	960	✓	9,600
1169-800	Loose pack tips	1000		10,000

#### 5. Low Binding 100-1250µl Pipet Tips with UltraFine™ Point

Ht: 3.500"  
100-1250µL, Fine

Item	Package	Qty/Pk	Sterile	Qty/Cs
1168-960	96 Rack	576		4,608
1168-965	96 Rack	576	✓	4,608
1168-800	Loose pack tips	1000		10,000
1168-260	Eclipse Refill	480		4,800

TO FIND OUT WHICH TIPS FIT YOUR PIPETTOR SEE PAGES 27-33

See page 15 for definitions of alphabetical symbols that appear next to tip photos.

Tips are actual size

#### Packaging Options





# Pipet Tips Compatibility Chart — BIOHIT

Popular Pipettor Brands

µl volume  
ranges shown  
**µl**



Page/Tip Type		BIOHIT					
		eLine		ePet		mLine	
		Channels		Channels		Channels	
1	8,12	1	8,12	1	8,12	Pipet Tips	
19,24	<b>A</b>	0.2-10	0.2-10	0.2-10	0.2-10	0.1-3, 0.5-10	0.5-10
9	<b>U</b>	0.2-10	0.2-10			0.5-10	0.5-10
9,16,17,24	<b>C</b>	5-120	5-120	5-100	5-100	2-20, 10-100	5-100
17,25	<b>D</b>					10-100, 20-200	
18,25	<b>E</b>	5-120	5-120		25-250	20-200	
9,18,25	<b>G</b>		5-120		25-250	20-200	30-300
17	<b>H</b>	5-120	5-120	5-100		10-100, 20-200	5-100
20	<b>L</b>	50-1000		50-1000		100-1000	
9,20,25	<b>I</b>	50-1000	50-1200	50-1200			
20	<b>K</b>				50-1200		
22	<b>W</b>					500-5000	
22	<b>X</b>					500-5000	
22	<b>Y</b>					1000-10000	

The most up to date  
versions of these charts  
are available at  
[www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)



Page/Tip Type		BIOHIT (Proline)					
		Proline Electronic		Proline		Proline Plus	
		Channels		Channels		Channels	
1	8,12	1	4, 8,12	1	8, 12	Pipet Tips	
19,24	<b>A</b>	0.2-10	0.2-10	0.1-2.5, 0.5-10	0.5-10	0.1-3, 0.5-10	0.5-10
9	<b>U</b>					0.1-3, 0.5-10	0.5-10
9,16,17,24	<b>C</b>	5-100	5-100	2-20, 5-50, 10-100	5-50	2-20, 10-100	10-100
17,25	<b>D</b>			10-100, 20-200		10-100, 20-200	
18,25	<b>E</b>	5-100	5-100	20-200		20-200	
18,25	<b>F</b>			20-200			5-250
9,18,25	<b>G</b>	25-250	10-250	50-200, 50-250	50-250, 50-300	20-200, 20-300	50-250, 30-300
17	<b>H</b>	5-100		5-50, 50-200		2-20, 10-100	10-100
20	<b>L</b>	50-1000				100-1000	
9,20,25	<b>I</b>	50-1000		100-1000		100-1000	
20	<b>K</b>	50-1200					
22	<b>W</b>	100-5000		100-5000			
22	<b>X</b>					500-5000	
22	<b>Y</b>					1000-10000	

# Pipet Tips Compatibility Chart — BIOHIT, BRAND

Popular Pipettor Brands



		<b>B R A N D</b>					
		Transferpette		Electronic		Transferpette S	
		Channels		Channels		Channels	
		1	8,12	1	8,12	1	8,12
<b>Page/Tip Type</b>		<b>Pipet Tips</b>					
19,24	<b>A</b>	0.1-1, 0.1-10	0.5-10		0.5-10	0.1-1, 0.5-10	0.5-10
19,24	<b>B</b>	0.5-10, 2-20	2-20	0.5-10, 2-20		2-20	
9,16,17,24	<b>C</b>	2-20, 5-50, 10-100, 20-200	2-20, 2.5-25, 5-50, 10-100, 20-200	20-200	5-100, 10-200	10-100, 20-200	5-50, 10-100, 20-200
17,25	<b>D</b>			20-200	5-100, 10-200	10-100, 20-200	
18,25	<b>E</b>	20-200	20-200	20-200		20-200	20-200
18,25	<b>F</b>	20-200, 25-250					
9,18,25	<b>G</b>	20-200, 25-250	30-300		15-300		
17	<b>H</b>	5-50, 10-100, 20-200	5-50, 10-100, 20-200	20-200	5-100, 10-200	20-200	10-100, 20-200
20	<b>L</b>	100-1000		100-1000		100-1000	100-1000
9,20,25	<b>I</b>	100-1000				100-1000	100-1000

The most up to date versions of these charts are available at [www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)



		<b>T H E R M O / F i n n p i p e t t e</b>						
		Digital, F1			Focus		Novus	
		Channels			Channels		Channels	
		1	8, 12	16	1	8,12	1	8,12
<b>Page/Tip Type</b>		<b>Pipet Tips</b>						
19,24	<b>A</b>	0.2-2, 0.5-10	0.5-10*		0.3-3, 0.5-5, 1-10	1-10	1-10	1-10
9,16,17,24	<b>C</b>	0.5-10, 2-20, 5-50, 10-100, 20-200	5-50, 1-10**		1-10, 3-30, 5-50, 10-100	5-50	1-10, 5-50, 10-100	5-50
18,25	<b>E</b>	2-20, 5-50, 10-100, 20-200	5-50					
9,18,25	<b>G</b>		50-300		30-300	30-300	30-300	30-300
17	<b>H</b>	2-20, 5-50, 10-100, 20-200	5-50		1-10, 3-30, 5-50, 10-100		10-100	5-50
20	<b>L</b>				100-1000		100-1000	
9,20,25	<b>I</b>	100-1000, 200-1000			100-1000		100-1000	
19	<b>T</b>			1-50				

\* for digital only

\*\* for F1 only

# Pipet Tips Compatibility Chart — EPPENDORF, GILSON

Popular Pipettor Brands



		<b>E P P E N D O R F</b>							
		Electronic		Reference		Research Pro		Research	
		Channels		Channels		Channels		Channels	
<b>Page/Tip Type</b>		<b>Pipet Tips</b>							
19,24	<b>A</b>	0.5-10	0.1-2.5, 0.5-10	0.5-10	0.5-10	0.1-2.5, 0.5-10	0.5-10		
19,24	<b>B</b>	0.5-20	2-20	0.5-10	0.5-10				
9,16,17,24	<b>C</b>	5-100, 20-200	2-20, 10-100, 50-200	5-100	5-100	2-20, 10-100, 20-200	10-100		
17,25	<b>D</b>	5-100, 20-200	2-20, 10-100, 50-200	5-100	5-100	2-20, 10-100, 20-200	10-100		
18,25	<b>E</b>	5-100, 20-200	2-20, 10-100, 50-200	5-100	5-100	2-20, 10-100, 20-200	10-100		
18,25	<b>F</b>	20-200				10-100, 20-200			
9,18,25	<b>G</b>	20-200	50-200	20-300	20-300		30-300		
17	<b>H</b>	5-100, 20-200	2-20, 10-100, 5-200	5-100	5-100	2-20, 10-100, 20-200	10-100		
20	<b>L</b>		100-1000	50-1000		100-1000			
9,20,25	<b>I</b>	50-1000	100-1000	50-1000, 50-1200		100-1000			
22	<b>W</b>			100-5000		500-5000			

The most up to date versions of these charts are available at [www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)



		<b>G I L S O N</b>							
		Pipetman		Pipetman Ultra		Neo		Concept	
		Channels		Channels		Channels		Channels	
<b>Page/Tip Type</b>		<b>Pipet Tips</b>							
19,24	<b>A</b>	0.2-2, 1-10	0.2-2, 1-10			0.2-2, 1-10	0.5-10	1-10	
9	<b>U</b>	0.2-2, 1-10	0.2-2, 1-10			0.2-2, 1-10			
9,16,17,24	<b>C</b>	2-20, 20-200, 50-200	2-20, 20-100, 20-200	1-20		2-20, 20-100, 20-200	5-100	10-100	
18,25	<b>E</b>	50-200	50-200						
9,18,25	<b>G</b>	50-200	20-200	20-300			20-300	30-300	
17	<b>H</b>	20-100, 5-200	20-100, 20-200			20-200	5-100	10-100	
20	<b>L</b>	20-1000	20-1000			100-1000			
9,20,25	<b>I</b>	20-1000	20-1000			100-1000			
22	<b>O</b>	1000-5000							
22	<b>X</b>	1000-5000							
22	<b>Y</b>	1000-10000	1000-10000						

# Pipet Tips Compatibility Chart — RAININ

Popular Pipettor Brands



µl volume  
ranges shown  
**µl**

		<b>R A I N I N</b>				
		E-Man Hybrid	EDP3 Plus	EDP3 with LTS		EDP1
		Channels	Channels	Channels		Channels
		1	1	1	8, 12, 16, 24	1
<b>Page/Tip Type</b>		<b>Pipet Tips</b>				
19,24	<b>A</b>		0.5-10			0.5-10
21	<b>Q</b>	0.1-2, 0.5-10, 2-20		0.5-10, 2-20	0.5-10	
9,16,17,25	<b>C</b>		2-20, 10-100, 20-200			2-20, 10-100, 20-200
18,25	<b>E</b>		20-200			20-200
21	<b>R</b>	10-100, 20-200		5-50, 20-200	5-50, 20-200	
18,25	<b>F</b>		20-200			
9,18,25	<b>G</b>		20-200, 20-300			20-300
17	<b>H</b>		2-20, 10-100, 20-200			2-20, 10-100, 20-200
20	<b>L</b>		100-1000			100-1000
9,20,25	<b>I</b>		100-1000			100-1000
21	<b>S</b>	100-1000		100-1000	100-1000	

The most up to date versions of these charts are available at [www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)




		<b>R A I N I N</b>					
		EDP1 with LTS		Pipet Lite SL	Pipet Lite/LTS	Pipet Plus/LTS	Classic
		Channels		Channels	Channels	Channels	Channels
		1	8, 12, 16, 24	1	1, 8, 12	1, 8, 12	1
<b>Page/Tip Type</b>		<b>Pipet Tips</b>					
19,24	<b>A</b>			0.1-2, 0.5-10			0.1-2, 0.5-10
21	<b>Q</b>	0.5-10, 2-20	1-10, 2-20		0.1-2, 0.5-10, 2-20	0.1-2, 0.5-10, 2-20	
9,16,17,24	<b>C</b>			2-20, 10-100, 20-200			2-20, 10-100, 20-200
18,25	<b>E</b>			20-200			20-200
21	<b>R</b>	10-100, 20-200	5-50, 20-200		10-100, 20-200	10-100, 20-200	
18,25	<b>F</b>			20-200			
17	<b>H</b>			2-20, 10-100, 20-200			10-100, 20-200
20	<b>L</b>			100-1000			100-1000
9,20,25	<b>I</b>			100-1000			100-1000
22	<b>O</b>						1000-5000
21	<b>S</b>	100-1000			100-1000	100-1000	
22	<b>X</b>						1000-5000
22	<b>Y</b>						5000-10000

# Pipet Tips Compatibility Chart — CAPP, CORNING, KENDALL, NICHIRYO

Other Pipettor Brands


$\mu$ l volume  
ranges shown  
 **$\mu$ l**




<b>C A P P</b>			
Aero Standard			
Channels			
1		8,12	
Page/Tip Type		Pipet Tips	
19,24	<b>A</b>	0.5-10	0.5-10
19,24	<b>B</b>	0.5-10	
9,16,17,24	<b>C</b>	2-20, 5-50, 10-100, 20-200	5-50, 20-200
18,25	<b>E</b>	20-200	20-200
9,18,25	<b>G</b>	50-300	30-300
17	<b>H</b>	20-200	20-200
20	<b>L</b>	100-1000	
9,20,25	<b>I</b>	100-1000	



<b>N I C H I R Y O</b>				
EX, EX Plus		Le	Nichipet 7000	
Channels		Channels	Channels	
1		1	8, 12	
Page/Tip Type		Pipet Tips		
19,24	<b>A</b>	0.2-2, 0.5-10	0.5-10	0.5-10
19,24	<b>B</b>	0.5-10		
9,16,17,24	<b>C</b>	2-20, 10-100, 20-200	2-20, 10-100, 20-200	5-50, 40-200
18,25	<b>E</b>	20-200	20-200	
18,25	<b>F</b>	20-200	20-200	
9,18,25	<b>G</b>	20-200	20-200	40-200, 50-300
17	<b>H</b>	10-100, 20-200	10-100, 20-200	5-50, 40-200
20	<b>L</b>	100-1000	100-1000	
9,20,25	<b>I</b>	100-1000	100-1000	
22	<b>X</b>	1000-5000		



<b>C O R N I N G</b>				
8/12-Pette		Octapette	Lambda	
Channels		Channels	Channels	
8, 12		8	1	
Page/Tip Type		Pipet Tips		
19,24	<b>A</b>		0.1-2.5, 0.5-10	
9,16,17,24	<b>C</b>	20-200	25,50,100,200	2-20, 10-100, 20-200
18,25	<b>E</b>	20-200	25,50,100,200	2-20, 10-100, 20-200
18,25	<b>F</b>	20-200		10-100, 20-200
9,18,25	<b>G</b>	20-200		
17	<b>H</b>	20-200		2-20, 10-100, 20-200
9,20,25	<b>I</b>			100-1000



<b>K E N D A L L</b>		
Oxford Benchmate		
Channels		
1		
Page/Tip Type		Pipet Tips
19,24	<b>A</b>	0.1-2, 0.5-10
19,24	<b>B</b>	0.5-10
9,16,17,24	<b>C</b>	10-100, 20-200, 40-200
18,25	<b>E</b>	20-200
18,25	<b>F</b>	20-200
9,18,25	<b>G</b>	20-200, 40-200
17	<b>H</b>	10-100, 20-200
9,20,25	<b>I</b>	200-1000
22	<b>O</b>	1000-5000

The most up to date versions of these charts are available at [www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)





# Pipet Tips Compatibility Chart — LABNET, HAMILTON, METTLER, THERMO

Other Pipettor Brands



LABNET					
Excel		Labpette Discovery			
Channels		Channels			
1	8, 12	1	8, 12		

Page/Tip Type		Pipet Tips			
19,24	<b>A</b>	0.5-10	0.5-10	0.2-2, 0.5-10	1-10
9	<b>U</b>	2-20	2-20		
9,16,17,24	<b>C</b>	10-200	10-200	2-20, 5-50, 10-100, 20-200	5-50, 20-200
18,25	<b>E</b>	10-200	10-200		
9,18,25	<b>G</b>			50-250	50-300
17	<b>H</b>	10-200	10-200	10-100, 20-200	20-200
20	<b>L</b>			100-1000	
9,20,25	<b>I</b>	100-1200	100-1200	100-1000	
22	<b>O</b>			1000-5000	
22	<b>Y</b>			1000-10000	



HAMILTON					
Softgrip		Softouch Electronic			
Channels		Channels			
1	8,12	1	8,12		

Page/Tip Type		Pipet Tips			
19,24	<b>A</b>	0.2-2, 1-10		0.2-10	0.2-10
9,16,17,24	<b>C</b>	2.5-25, 10-100	5-50	5-100	
18,25	<b>E</b>	10-100		5-100	
18,25	<b>F</b>	10-100			
9,18,25	<b>G</b>		30-300		25-250
17	<b>H</b>	2.5-25, 10-100	5-50	5-100	
20	<b>L</b>	100-1000		50-1000	
9,20,25	<b>I</b>	100-1000		50-1000	



THERMO / Matrix			
Impact 2		Shorty	
Channels		Channels	
1, 8		1	

Page/Tip Type		Pipet Tips	
9	<b>U</b>	12.5, 30**	12.5, 30**
9,16,17,24	<b>C</b>	2-125, 5-250	2-125, 5-250
18,25	<b>E</b>	5-250	5-250
18,25	<b>F</b>	5-250	5-250
9,18,25	<b>G</b>	5-250	5-250
17	<b>H</b>	2-125	2-125
20	<b>J</b>	15-1250	15-1250

\*\* Not for 16 Channel Equalizer.



METTLER		
Multimate		
Channels		
1		

Page/Tip Type		Pipet Tips
19,24	<b>A</b>	0.1-2.5, 0.5-10
9,16,17,24	<b>C</b>	2-20, 10-100, 20-200
17,25	<b>D</b>	2-20, 10-100, 20-200
18,25	<b>E</b>	2-20, 10-100, 20-200
18,25	<b>F</b>	10-100, 20-200
17	<b>H</b>	2-20, 10-100, 20-200
9,20,25	<b>I</b>	100-1000



The most up to date versions of these charts are available at [www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)

# Pipet Tips Compatibility Chart — SOCOREX, POULTEN, VISTALAB

Other Pipettor Brands



		<b>S O C O R E X</b>						
		Acura 825		Acura 835	Calibra 822	Calibra 825	Electro 925	Electro 955
		Channels		Channels	Channels	Channels	Channels	Channels
		1	8, 12	1	1	8, 12	1	8, 12
<b>Page/Tip Type</b>		<b>Pipet Tips</b>						
19,24	<b>A</b>	0.1-2, 0.5-10					0.5-10	0.5-10
19,24	<b>B</b>		0.5-10		0.2-2, 1-10	1-10		
9,16,17,24	<b>C</b>	1-10, 2-20, 5-50, 10-100, 20-200	5-50, 20-200		1-10, 2-20, 5-50, 10-100, 20-200	10-100, 20-200	2.5-50, 10-100	2.5-50
18,25	<b>E</b>	20-200			20-200	20-200	10-200	
18,25	<b>F</b>	20-200		20-200				
9,18,25	<b>G</b>		40-350		20-200	20-200		
17	<b>H</b>	20-200		20-200	20-200	20-200		2.5-50
20	<b>L</b>	100-1000			100-1000			
9,20,25	<b>I</b>	100-1000			100-1000			
22	<b>W</b>			500-5000				
22	<b>X</b>			500-5000				



		<b>POULTEN</b>	
		Volac Ultra Variable	
		Channels	
		1	
<b>Page/Tip Type</b>		<b>Pipet Tips</b>	
19,24	<b>B</b>	1-10	
9,16,17,24	<b>C</b>	5-50, 20-100, 20-200	
18,25	<b>E</b>	20-200	
18,25	<b>F</b>	20-200	
17	<b>H</b>	20-200	
9,20,25	<b>I</b>	100-1000	



		<b>V I S T A L A B</b>			
		MLA	Ovation	Ovation Electronic	
		Channels	Channels	Channels	
		1	1	1	8, 12
<b>Page/Tip Type</b>		<b>Pipet Tips</b>			
19,24	<b>A</b>		1-10	0.5-20	0.5-20
9	<b>U</b>		0.2-2, 1-10	0.2-2	0.2-2
9,16,17,24	<b>C</b>	10-50, 50-200	10-100, 20-200	2-125, 5-250	2-125, 5-250
18,25	<b>E</b>	10-50, 50-200	20-200	2-125, 5-250	2-125, 5-250
18,25	<b>F</b>	50-200			
9,18,25	<b>G</b>		20-200	5-250	5-250
17	<b>H</b>	10-50, 50-200	10-100, 20-200	2-125	2-125
20	<b>L</b>		100-1000, 201-1000*		
9,20,25	<b>I</b>		100-1000*	25-1250*	

\* requires Type A Nozzle Vistalab #9057-1016 100-1000µl, 201-1000µl

The most up to date versions of these charts are available at [www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)

# LIQUID HANDLING

Aerosol Filter Pipet Tips



# LIQUID HANDLING

## ZAP™ Premier Aerosol Filter Pipet Tips



**Non-Pyrogenic**

ZAP™ Premier™ Aerosol Filter Tips provide you with complete protection from sample carry over. They incorporate a robotically inserted patented filter that is made from high molecular weight polyethylene. The filters allow the pipettor to draw by venting through a tortuous sponge-like pathway. The pores in this pathway have an average size of 10 µm, so even radionucleotides are captured before reaching the pipettor barrel.

- For PCR\*, DNA manipulation, P<sup>32</sup>
- Autoclavable
- Sample can be completely recovered without cutting into tip
- Prevents pipettor contamination from aerosols or fluid spray
- Tips for the pipettors you use
- Lot by Lot certified purity



### Proven Performance in Stopping Pipettor Contamination

The data shown below summarizes the results of an aggressive independent study that looked at the ability of our aerosol filter tips to prevent contamination from pipetting radionucleotides. With a background of 14, these tips blocked aerosols and kept cpm under twice the background.

Lot #	Manufacturer Catalog #	Aerosol Tip Brand	Tip # 1	Tip # 2	Tip # 3	Tip # 4	Tip # 5	Tip # 6	Tip # 7	Tip # 8	Tip # 9	Tip # 10	Average CPM
927014	2069	ART	13.7	64.7	21.3	12.9	23.9	11.6	18.6	17.3	10.6	21.3	21.59
0358	2249035-4	Eppendorf	28.4	23.2	18.4	9.9	9.9	14	4.5	11.6	20	12.8	15.27
9210	1054-965	ZAP Premier	29.5	9.5	17.9	11	3.3	16	25.7	12	12.9	18.5	15.63
2999G	HR-200F	Rainin	16.9	0	14.6	15.6	8.2	15	14.6	22.2	23.8	10.3	14.12

Each filter tip sample drew the maximum volume allowed by the tip of an aqueous solution containing 32P-ATP having a specific activity of 2,688, 615 cpm per ml. For each tip, the test solution was drawn and expelled five times. Tips were placed in sterile microcentrifuge tubes and sterile water was used to rinse the interior walls of the tips above the filter. The water was allowed to stand on the upper surface of the filter for 15 seconds, then immediately removed and added to scintillation fluid. Samples were then counted.

\* PCR\* is a patented process of Hoffman-LaRoche. Use of the PCR\* process requires a license.

# LIQUID HANDLING

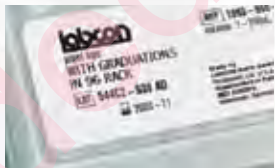
## ZAP™ Premier Aerosol Filter Pipet Tips

### The ZAP Premier Advantage



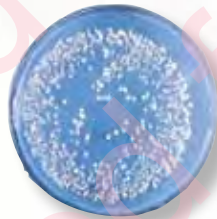
**1.** Each style of these tips is designed from the beginning to fit precisely the range of pipettors listed in the fit charts. We carefully inspect the fit with the actual pipettors, not just with measuring gauges. This means you will not have to worry about leaking tips and you don't have to use extra force to mount tips.

**2.** The quality of the resins we use to make tips is unsurpassed by any other pipette tips available anywhere. We only use medical grade resins from consistent sources that have been pre-tested to ensure they do not introduce contaminants into your samples. So you won't have to be concerned there could be unknown substances added to your work.



**3.** Each rack is labeled with the effective volume range of the tip, the lot number, and product number. So it's easy to keep your work organized and ensure your supplies are traceable.

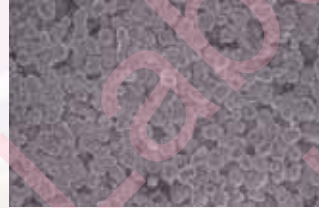
**4.** Every lot of tips is tested and is certified to be free of RNase/DNase contamination, Human DNA, and unlike tips from other suppliers tips are tested and certified non-pyrogenic. This non-pyrogenic certification also includes the filter, so your sample can even contact the filter and you do not need to worry that your sample is contaminated.



**5.** You can choose from 25 styles of tips to fit all major brands of pipettors in the world. So you will always have a ZAP Premier option for nearly any use.



**6.** ZAP Premier tips feature a unique 10 micron pore size filter. The pores on this filter are 100% smaller than those in most other aerosol tips. A smaller pore guarantees that your pipettor barrel will be kept clean of DNA,



Radionucleotides, and other contaminants. And this filter works to block fluids without any contaminants in the filter so you never have to worry that your work will be spoiled if your sample contacts the filter.

**7.** ZAP Premier tips with their dense filter are autoclavable to 121° Celsius for 20 minutes. So if you don't use the entire box of tips you can sterilize them again and the filters will not warp like other filters.



**8.** ZAP Premier tips are packaged in racks designed to be refilled easily with our Eclipse refills. This lets you extend your investment and helps to save resources.

### ZAP Premier Aerosol Filters Won't Contaminate Your Sample

Aerosol Tip Brand	240nm	260nm	280nm	310nm	Average
ART	0.385	0.276	0.219	0.141	0.25525
Eppendorf	0.065	0.081	0.042	0.008	0.02870
Sorenson Multi	0.060	0.026	0.015	0.008	0.02730
Rainin	0.039	0.019	0.013	0.005	0.01900
Corning Costar	0.048	0.014	0.008	0.003	0.01825
Biohit	0.025	0.026	0.014	0.004	0.01725
HighRecovery™	0.003	0.004	0.001	0.003	0.00275

Two sets of thirty samples from each brand of filtered pipet tip were analyzed for this test. The tips were cut to eject the filter from the tip into sterile glass beakers. 10mL of TE buffer was added to each set of thirty filter samples. The beakers were sealed with parafilm and placed in a 65°C incubator for one hour. After incubation, the extraction fluid was analyzed using a UV/VIS spectrophotometer at 240, 260, 280, and 310nm. The results were recorded.

ZAP Premier tips are made to eliminate contamination from the filter. The results of the study above show the high levels of impurity in some popular brands of filter tips. Contamination is so high with some of the tips that they could easily foul your results and interfere with PCR reactions.

### ZAP Premier Filter Tips Fit the Pipettors You Really Use



LOT SPECIFIC



PURITY

Labcon offers a complete family of tips for the pipettors you typically use. This chart shows there is a Labcon ZAP tip for micro pipettors in all popular ranges.

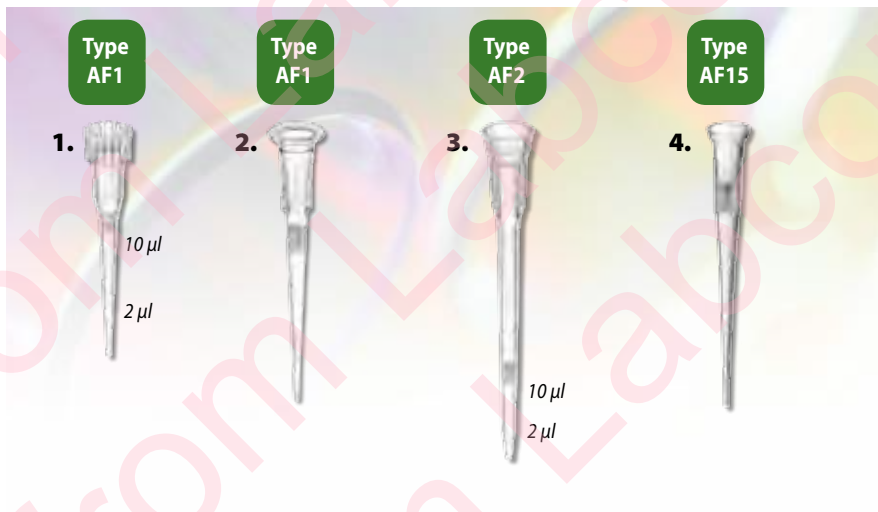
### Non-Pyrogenic



Every lot lab tested for purity.

### ZAP Aerosol Filter Tips Guarantee PCR\* Reliable Purity

Use Labcon tips in your lab work with confidence. All Labcon tips are manufactured robotically to eliminate contamination. Every lot of tips produced is tested on the pipets they are intended for, ensuring they fit and perform correctly. The resin used for tips is pretested before use to determine its extractables profile. Resins that have high levels of residue in the 240 to 310 nm range are excluded from use. Aerosol filters are tested for endotoxin contaminants using a Chromogenic Assay U.S.P. testing method. All batches of product are tested for presence of nuclease (RNase and DNase) using an electrophoresis gel method after final packaging. A reaction test is run to certify there is no human DNA on these tips.



#### 1. 0.1-10µl with UltraFine™ Point and Graduations at 2, 10µl

Ht: 1.237"  
Max fill: 10.7 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1051-960	96 Rack	1152		11,520
1051-965	96 Rack	1152	✓	11,520
1051-290	Pagoda Refill	864		8,640
1051-290-020	Pagoda Express Refill	864	✓	8,640
1051-800	Loose pack tips	1000		10,000
1051-165	Individually Wrapped	200	✓	2,000

#### 2. 0.1-10µl Extended Length with Tubegard™ Ring

Ht: 1.500"  
Max fill: 20.0 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1151-960	96 Rack	960		9,600
1151-965	96 Rack	960	✓	9,600
1151-800	Loose pack tips	1000		10,000

#### 3. 0.5-10µl with Bevel Point™ and Graduations at 2, 10µl

Ht: 1.765"  
Max fill: 10.5 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1052-960	96 Rack	960		9,600
1052-965	96 Rack	960	✓	9,600
1052-800	Loose pack tips	1000		10,000

#### 4. 0.1-10µl with UltraFine™ Point

Ht: 1.500"  
Max fill: 20.0 µl

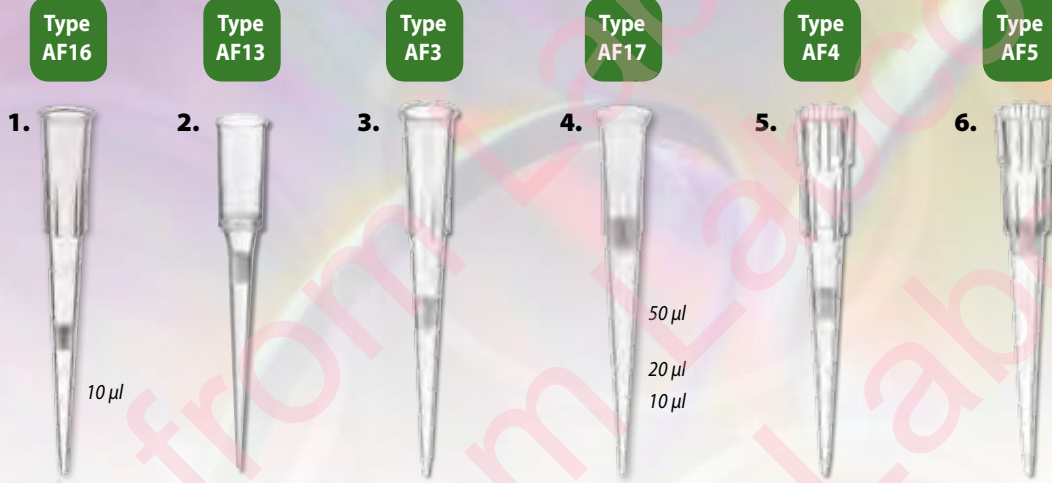
Item	Package	Qty/Pk	Sterile	Qty/Cs
1150-965	96 Rack	960	✓	9,600

\* PCR\* is a patented process of Hoffman-LaRoche. Use of the PCR\* process requires a license.

# LIQUID HANDLING

## ZAP™ Premier Aerosol Filter Pipet Tips

### Non-Pyrogenic



#### 1. 0.5-10 µl with Graduations at 10µl

Ht: 1.955"  
Max fill: 12 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1091-965	96 Rack	960	✓	9,600

#### 2. 1-20µl Aerosol Tip for Rainin LTS®

Ht: 1.900"

Item	Package	Qty/Pk	Sterile	Qty/Cs
1153-965	96 Rack	960	✓	9,600

#### 3. 1-40µl with Bevel Point™

Ht: 1.955"  
Max fill: 40.6 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1055-960	96 Rack	960		9,600
1055-965	96 Rack	960	✓	9,600
1055-800	Loose pack tips	1000		10,000
1055-165	Individually Wrapped	200	✓	2,000

#### 4. 1-50µl with Graduations at 10, 20, 50µl and UltraFine™ Point

Ht: 1.955"  
Max fill: 102 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1096-965	96 Rack	960	✓	9,600

#### 5. 1-50µl with Bevel Point™

Ht: 1.955"  
Max fill: 53.5 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1053-960	96 Rack	960		9,600
1053-965	96 Rack	960	✓	9,600
1053-800	Loose pack tips	1000		10,000
1053-165	Individually Wrapped	200	✓	2,000

#### 6. 1-100µl with Bevel Point™

Ht: 1.955"  
Max fill: 101.2 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1054-960	96 Rack	960		9,600
1054-965	96 Rack	960	✓	9,600
1054-800	Loose pack tips	1000		10,000
1054-165	Individually Wrapped	200	✓	2,000

TO FIND OUT WHICH TIPS FIT YOUR PIPETORS SEE PAGES 43-48

Tips are actual size

### Packaging Options



### Non-Pyrogenic



**1. 1-100µl with Bevel Point™ and Graduations at 10, 20, 50, 100µl**

Ht: 1.955"  
Max fill: 105µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1092-965	96 Rack	960	✓	9,600

**2. 1-100µl with Bevel Point™**

Ht: 1.955"  
Max fill: 105µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1094-965	96 Rack	960	✓	9,600

**3. 1-100µl for Gel Loading**

Ht: 2.544"  
Max fill: 101µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1095-965	96 Rack	576	✓	4,608

**4. 1-160µl with Bevel Point™**

Ht: 1.955"  
Max fill: 165.3 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1056-960	96 Rack	960		9,600
1056-965	96 Rack	960	✓	9,600
1056-800	Loose pack tips	1000		10,000
1056-165	Individually Wrapped	200	✓	2,000

**5. 1-200µl with UltraFine™ Point**

Ht: 2.050"  
Max fill: 207.3 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1059-960	96 Rack	960		9,600
1059-965	96 Rack	960	✓	9,600
1059-800	Loose pack tips	1000		10,000
1059-165	Individually Wrapped	200	✓	2,000

TO FIND OUT WHICH TIPS FIT YOUR PIPETORS SEE PAGES 43-48

Tips are actual size



Non-Pyrogenic Endotoxin Free

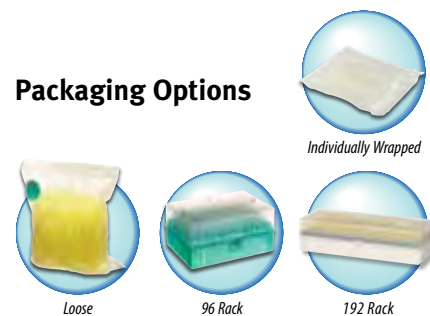


Certified Low Trace Metals



CFR 21 USFDA COMPLIANT ✓

### Packaging Options

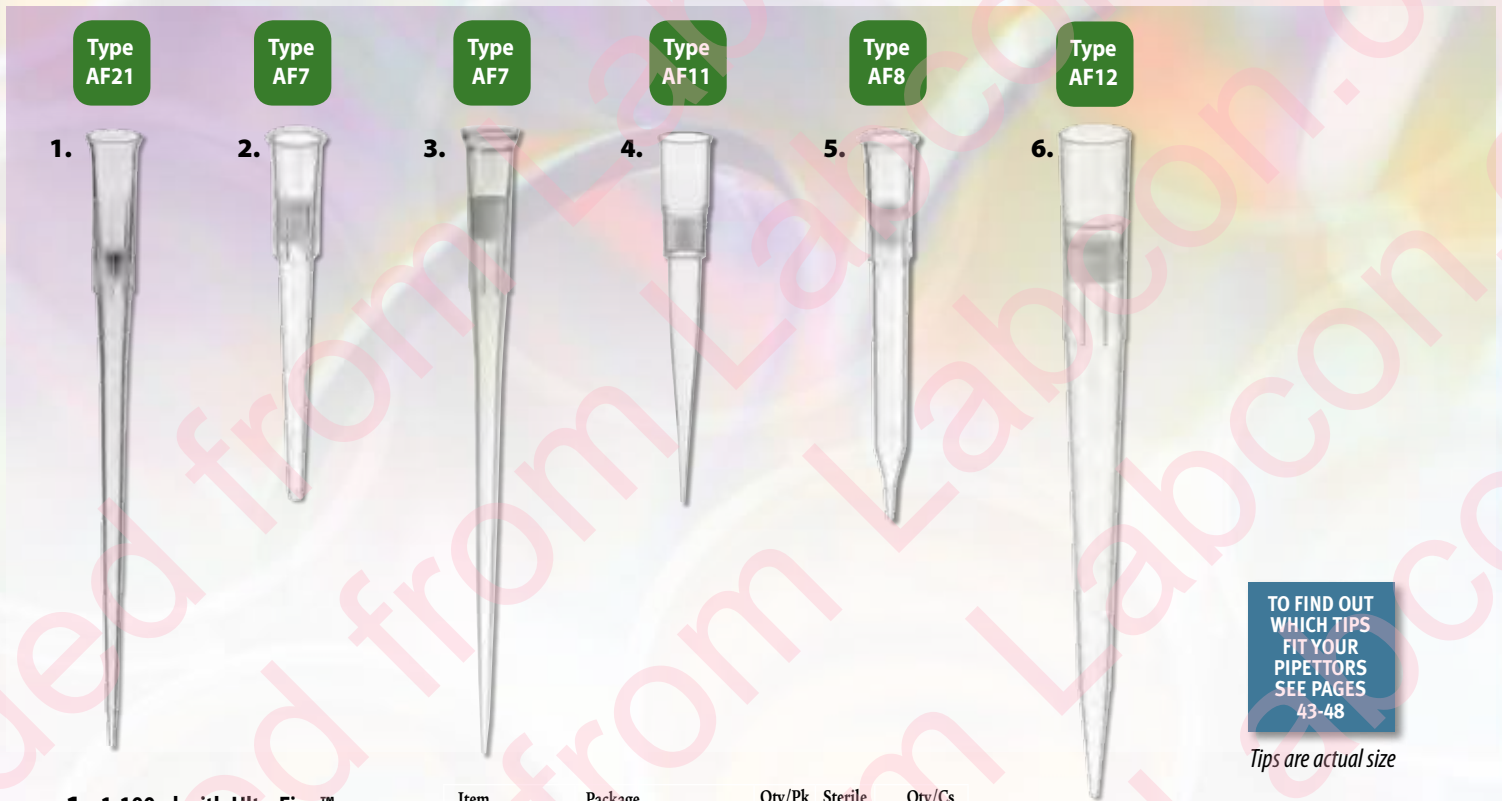




# LIQUID HANDLING

## ZAP™ Premier Aerosol Filter Tips

### Non-Pyrogenic



#### 1. 1-100 µl with UltraFine™ Point and Extended Length

Ht: 3.300"  
Max fill: 180.0 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1098-965	96 Rack	576	✓	4,608

#### 2. 1-200 µl Wide Orifice for Whole Cells with Bevel Point™

Ht: 1.955"  
Max fill: 208.0 µl  
Orifice: 1.450 mm

Item	Package	Qty/Pk	Sterile	Qty/Cs
1152-960	96 Rack	960		9,600
1152-965	96 Rack	960	✓	9,600
1152-800	Loose pack tips	1000		10,000
1152-165	Individually Wrapped	200	✓	2,000

#### 3. 1-200 µl with UltraFine™ Point

Ht: 3.300"  
Max fill: 248.0 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1156-960	96 Rack	576		4,608
1156-965	96 Rack	576	✓	4,608
1156-800	Loose pack tips	1000		10,000
1156-165	Individually Wrapped	200	✓	2,000

#### 4. 1-200 µl Aerosol Tip for Rainin LTS®

Ht: 1.955"  
Max fill: 217.0 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1154-965	96 Rack	960	✓	9,600

#### 5. 1-300 µl with Bevel Point™

Ht: 2.050"  
Max fill: 305.0 µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1058-960	96 Rack	960		9,600
1058-965	96 Rack	960	✓	9,600
1058-800	Loose pack tips	1000		10,000

#### 6. 100-1000 µl for Rainin® LTS®

Ht: 3.500"  
Max fill: 1016.0 µl

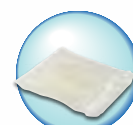
Item	Package	Qty/Pk	Sterile	Qty/Cs
1155-965	96 Rack	576	✓	4,608

TO FIND OUT WHICH TIPS FIT YOUR PIPETORS SEE PAGES 43-48

Tips are actual size



### Packaging Options



Individually Wrapped

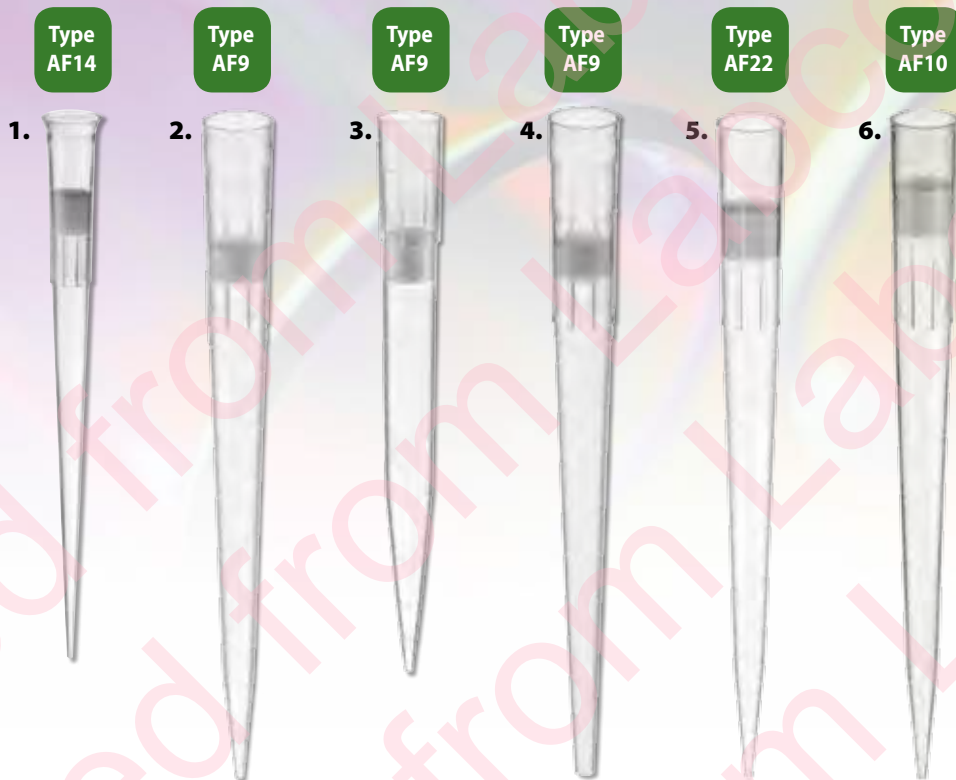


Loose



96 Rack

**Non-Pyrogenic**



TO FIND OUT WHICH TIPS FIT YOUR PIPETTOR SEE PAGES 43-48

Tips are actual size

**1. 1-300µl with UltraFine™ Point and Extended Length**

Ht: 2.875"  
Max fill: 324.0µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1158-965	96 Rack	576	✓	4,608

**2. 100-1000µl with UltraFine™ Point**

Ht: 3.500"  
Max fill: 1050.0µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1057-960	96 Rack	576		4,608
1057-965	96 Rack	576	✓	4,608
1057-800	Loose pack tips	1000		10,000
1057-165	Individually Wrapped	200	✓	2,000

**3. 100-1000µl with Flextop™ and UltraFine™ Point**

Ht: 2.990"  
Max fill: 1010.1µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1097-965	96 Rack	576	✓	4,608

**4. 100-1000µl with Flextop™ and Wide Orifice for pipetting whole cells**

Ht: 3.500"  
Max fill: 1005.0µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1199-965	96 Rack	576	✓	4,608

**5. 100-1200µl for Biohit® pipettors**

Ht: 3.500"  
Max fill: 1250.0µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1159-960	96 Rack	576		4,608
1159-965	96 Rack	576	✓	4,608
1159-800	Loose pack tips	1000		10,000

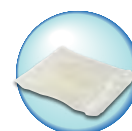
**6. 100-1250µl for Matrix® Impact pipettors**

Ht: 3.500"  
Max fill: 1260.0µl

Item	Package	Qty/Pk	Sterile	Qty/Cs
1157-960	96 Rack	576		4,608
1157-965	96 Rack	576	✓	4,608
1157-800	Loose pack tips	1000		10,000



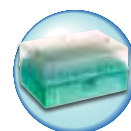
**Packaging Options**



Individually Wrapped



Loose



96 Rack



# Aerosol Filter Tips Compatibility Chart — BIOHIT, BRAND

Popular Pipettor Brands



## BIOHIT

eLine		ePet		mLine	
Channels		Channels		Channels	
1	8,12	1	8,12	1	8,12

Page/Tip Type

Aerosol Tips

37	<b>AF1</b>	0.2-10	0.2-10	0.2-10	0.2-10	0.1-3, 0.5-10	
37	<b>AF15</b>	0.2-10	0.2-10			0.1-3, 0.5-10	
37	<b>AF2</b>			0.2-10			
38	<b>AF3</b>					2-20	
38	<b>AF4</b>					2-20	
39	<b>AF19</b>						5-100
39	<b>AF18</b>			5-100	5-100	5-100	
38	<b>AF17</b>			5-100	5-100	5-100	
39	<b>AF20</b>			5-100	5-100	5-100	
40	<b>AF5</b>					10-100	
39,40	<b>AF6</b>	5-120					
41,42,45	<b>AF7</b>					20-200	
41	<b>AF14</b>	10-300	10-300		25-250	20-200	30-300
40	<b>AF8</b>				25-250	20-200	
41	<b>AF9</b>	50-1000		50-1200*	50-1200*	100-1000	
41	<b>AF22</b>			50-1200*	50-1200*		

\* will only hold 1000µl on ePet pipettor.



## BIOHIT (Proline)

Proline Electronic		Proline		Proline Plus
Channels		Channels		Channels
1	8,12	1	4, 8,12	1

Page/Tip Type

Aerosol Tips

37	<b>AF1</b>	0.2-10	0.2-10	0.5-10	0.5-10	0.1-3, 0.5-10
37	<b>AF15</b>					0.5-10
37	<b>AF2</b>					20-200
38	<b>AF3</b>					2-20
38	<b>AF4</b>			5-50	5-50	
39	<b>AF19</b>	5-100	5-100	10-100		10-100
39	<b>AF18</b>	5-100	5-100	10-100		10-100
38	<b>AF17</b>	5-100	5-100	10-100		10-100
39	<b>AF20</b>	5-100	5-100	10-100		10-100
40	<b>AF21</b>					10-100
39,40	<b>AF7</b>	5-100		50-200		20-200
41	<b>AF14</b>	10-250	25-250	50-200	50-250, 50-300	
40	<b>AF8</b>			10-250		
41	<b>AF9</b>	50-1000		200-1000		100-1000
41	<b>AF22</b>	50-1200	50-1200			



## BRAND

Transferpette		Electronic		Transferpette S	
Channels		Channels		Channels	
1	8,12	1	8,12	1	8,12

Page/Tip Type

Aerosol Tips

37	<b>AF1</b>	0.1-10	0.5-10			0.1-1, 0.5-10	0.5-10
37	<b>AF2</b>	0.5-10	2-20	0.5-10	0.5-10	2-20	
38	<b>AF3</b>	2-20	2-20, 2.5-25				
38	<b>AF4</b>	5-50	5-50				
39	<b>AF19</b>	10-100	10-100		5-100	10-100	10-100
39	<b>AF18</b>	10-100	10-100		5-100	10-100	10-100
38	<b>AF17</b>	10-100	10-100		5-100	10-100	10-100
39	<b>AF20</b>	10-100	10-100		5-100	10-100	10-100
38	<b>AF5</b>			10-100			
40	<b>AF21</b>	10-100	10-100		5-100	10-100	10-100
39,40	<b>AF7</b>	20-200	20-200	20-200	10-200	20-200	20-200
41	<b>AF14</b>	25-250	30-300	20-200, 30-300	15-300		30-300
40	<b>AF8</b>	25-250					
41	<b>AF9</b>	100-1000		100-1000		100-1000	

The most up to date versions of these charts are available at [www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)



# Aerosol Filter Tips Compatibility Chart — EPPENDORF, GILSON

Popular Pipettor Brands



		<b>E P P E N D O R F</b>					
		Electronic Channels	Reference Channels	Research Pro Channels		Research Channels	
		1	1	1	8,12	1	8,12
<b>Page/Tip Type</b>		<b>Aerosol Tips</b>					
37	<b>AF1</b>	0.2-10	0.1-2.5	0.5-10	0.5-10	0.1-2.5, 0.5-10	0.5-10
37	<b>AF15</b>					0.5-10	
37	<b>AF2</b>		0.5-10, 2-20	0.5-10	0.5-10		
38	<b>AF3</b>	5-100	2-20			2-20	
38	<b>AF4</b>	5-100					
39	<b>AF19</b>	5-100	10-100	5-100	5-100	10-100	10-100
39	<b>AF18</b>	5-100	10-100	5-100	5-100	10-100	10-100
38	<b>AF17</b>	5-100	10-100	5-100	5-100	10-100	10-100
39	<b>AF20</b>	5-100	10-100	5-100	5-100	10-100	10-100
38	<b>AF5</b>	5-100	10-100	5-100	5-100	10-100	10-100
40	<b>AF21</b>			5-100	5-100	10-100	10-100
39,40	<b>AF7</b>	5-100	50-200			20-200	
41	<b>AF14</b>		50-200	20-300	20-300	20-200	30-300
40	<b>AF8</b>		50-200			20-200	
41	<b>AF9</b>		100-1000	50-1000		100-1000	

$\mu$ l volume ranges shown  
 **$\mu$ l**



		<b>G I L S O N</b>					
		Pipetman Channels	Pipetman Ultra Channels		Neo Channels	Concept Channels	
		1	1	8, 12	1	1	8,12
<b>Page/Tip Type</b>		<b>Aerosol Tips</b>					
37	<b>AF1</b>	0.2-2, 1-10	0.2-2, 1-10		0.2-2, 1-10	0.5-10	1-10
38	<b>AF3</b>	2-20	2-20	1-20	2-20		
39	<b>AF19</b>	20-100	20-100		20-100	5-100	10-100
39	<b>AF18</b>	20-100	20-100		20-100	5-100	10-100
38	<b>AF17</b>	20-100	20-100		20-100	5-100	10-100
39	<b>AF20</b>	20-100	20-100		20-100	5-100	10-100
38	<b>AF5</b>	20-100					
39,40	<b>AF7</b>	50-200	20-200		20-200	5-100	10-100
41	<b>AF14</b>	50-200	20-200	20-300		20-300	30-300
40	<b>AF8</b>	50-200	20-200				
41	<b>AF9</b>	200-1000	200-1000		100-1000		

The most up to date versions of these charts are available at [www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)

# Aerosol Filter Tips Compatibility Chart — RAININ, THERMO

Popular Pipettor Brands



## RAININ

EDP3 Plus	EDP1	Pipet Lite SL	Classic	E-Man Hybrid	EDP3 with LTS		EDP1 with LTS		Pipet Lite & Plus w/LTS
Channels	Channels	Channels	Channels	Channels	Channels		Channels		Channels
1	1	1	1	1	1	8, 12, 16, 24	1	8, 12, 16, 24	1, 8, 12

Page/Tip Type

Aerosol Tips

37	<b>AF1</b>	0.5-10	0.5-10	0.1-2, 0.5-10	0.1-2, 0.5-10						
38	<b>AF3</b>	2-20	2-20	2-20	2-20						
38	<b>AF13</b>	0.1-2, 0.5-10, 2-20	0.1-2, 0.5-10, 2-20	0.1-2, 0.5-10, 2-20		0.1-2, 0.5-10, 2-20	0.5-10, 2-20	0.5-10	0.5-10, 2-20	1-10, 2-20	0.1-2, 0.5-10, 2-20
39	<b>AF19</b>			10-100	10-100						
39	<b>AF18</b>			10-100	10-100						
38	<b>AF17</b>			10-100	10-100						
39	<b>AF20</b>			10-100	10-100						
38	<b>AF5</b>	10-100	10-100								
39,40	<b>AF7</b>	20-200	20-200	20-200	20-200						
40	<b>AF11</b>	10-100, 20-200	10-100, 20-200	10-100, 20-200		10-100, 20-200	5-50, 20-200	5-50, 20-200	10-100, 20-200	5-50, 20-200	10-100, 20-200
40	<b>AF12</b>	100-1000	100-1000	100-1000		100-1000	100-1000	100-1000	100-1000		100-1000
41	<b>AF14</b>	20-300	20-300	20-300	20-200						
40	<b>AF8</b>	20-200		20-200							
41	<b>AF9</b>	100-1000	100-1000	100-1000							



## THERMO / Finnpiquette

Digital, F1		Focus		Novus
Channels		Channels		Channels
1	8, 12	1	8, 12	1

Page/Tip Type

Aerosol Tips

37	<b>AF1</b>	0.2-2**, 0.2-10*, 0.5-5**, 0.5-10*, 1-10**	0.5-10*, 1-10**	0.3-3, 0.5-5, 1-10	1-10	1-10
37	<b>AF15</b>	0.5-10				
38	<b>AF3</b>	2-20		3-30		
38	<b>AF4</b>	5-50* Digital only	5-50		5-50	5-50
39	<b>AF19</b>			1-10		
39	<b>AF18</b>	10-100**	10-100**	10-100		
38	<b>AF17</b>	10-100**	10-100**	10-100		
39	<b>AF20</b>	10-100**	10-100**	10-100		
38	<b>AF5</b>	10-100**	10-100**	10-100		
40	<b>AF21</b>	10-100**	10-100**	10-100		
41	<b>AF14</b>		30-300**	30-300		
41	<b>AF9</b>	100-1000, 200-1000		100-1000		100-1000
41	<b>AF10</b>	100-1000				
38	<b>AF16</b>	0.5-10*, 1-10**				

\* for digital only; \*\* for F1 only



## THERMO/Matrix

Impact/2	Shorty
Channels	Channels
1	1

Page/Tip Type

Aerosol Tips

37	<b>AF15</b>	0.5-12.5, 30*	0.5-12.5, 30*
39	<b>AF6</b>	2-125	2-125
39,40	<b>AF7</b>	2-125, 5-250	2-125, 5-250
41	<b>AF14</b>	5-250	5-250
40	<b>AF8</b>	5-250	5-250
41	<b>AF9</b>	15-1250	15-1250
41	<b>AF10</b>	15-1250	15-1250

\* Not for 16 Channel Equalizer



The most up to date versions of these charts are available at [www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)

# Aerosol Filter Tips Compatibility Chart — LABNET, METTLER, NICHIRYO, POULTEN

Popular Pipettor Brands



## NICHIRYO

EX, EX Plus	Le	Nichipet 7000
Channels	Channels	Channels
1	1	8, 12

### Page/Tip Type Aerosol Tips

37	<b>AF1</b>	0.2-2, 0.5-10	0.5-10	0.5-10
38	<b>AF4</b>			5-50
39	<b>AF19</b>	10-100	10-100	
39	<b>AF18</b>	10-100	10-100	
38	<b>AF17</b>	10-100	10-100	
39	<b>AF20</b>	10-100	10-100	
39,40	<b>AF7</b>	20-200	20-200	40-200
41	<b>AF14</b>	20-200	20-200	40-200, 50-300
40	<b>AF8</b>	20-200	20-200	
41	<b>AF9</b>	100-1000	100-1000	



## POULTEN

Volac Ultra Variable
Channels
1

### Page/Tip Type Aerosol Tips

37	<b>AF2</b>	1-10
38	<b>AF4</b>	5-50
39	<b>AF19</b>	10-100
39	<b>AF18</b>	10-100
38	<b>AF17</b>	10-100
39	<b>AF20</b>	10-100
39,40	<b>AF7</b>	20-200
41	<b>AF9</b>	100-1000



## LABNET

Labpette Discovery		Biopette E Electronic	
Channels		Channels	
1	8, 12	1	8, 12

### Page/Tip Type Aerosol Tips

37	<b>AF1</b>	0.2-2, 0.5-10	0.5-10, 1-10	0.5-10	0.5-10
37	<b>AF15</b>			2-20	2-20
37	<b>AF2</b>	0.2-2, 1-10			
38	<b>AF3</b>	2-20	2-20		
38	<b>AF4</b>	5-50	5-50		
39	<b>AF19</b>	10-100			
39	<b>AF18</b>	10-100			
38	<b>AF17</b>	10-100			
39	<b>AF20</b>				
38	<b>AF5</b>	10-100	10-100		
39,40	<b>AF7</b>	20-200	20-200	10-200	10-200
41	<b>AF14</b>	50-250	50-300		
40	<b>AF8</b>		20-200, 50-300		
41	<b>AF9</b>	100-1000	100-1000		



## METTLER

Toledo
Channels
1


### Page/Tip Type Aerosol Tips

37	<b>AF1</b>	0.1-2.5, 0.5-10
38	<b>AF3</b>	2-20
38	<b>AF5</b>	10-100
39,40	<b>AF7</b>	20-200
40	<b>AF8</b>	20-200
41	<b>AF9</b>	100-1000


The most up to date versions of these charts are available at [www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)

# Aerosol Tips Compatibility Chart — CAPP, CORNING, HAMILTON, KENDALL

Other Pipettor Brands




		<b>C O R N I N G</b>		
		8/12-Pette	Octapette	Lambda
		Channels	Channels	Channels
		8, 12	8	1
<b>Page/Tip Type</b>		<b>Aerosol Tips</b>		
37	<b>AF1</b>			0.1-2.5, 0.5-10
38	<b>AF3</b>			2-20
38	<b>AF4</b>			2-20
38	<b>AF5</b>			10-100
39,40	<b>AF7</b>	20-200	25, 50, 100, 200	20-200
41	<b>AF14</b>	20-200		
40	<b>AF8</b>	20-200		20-200
41	<b>AF9</b>			100-1000




		<b>C A P P</b>	
		Aero Standard	
		Channels	
		1	8,12
<b>Page/Tip Type</b>		<b>Aerosol Tips</b>	
37	<b>AF1</b>	0.5-10	0.5-10
38	<b>AF4</b>	5-50	5-50
39	<b>AF19</b>	10-100	
39	<b>AF18</b>	10-100	
38	<b>AF17</b>	10-100	
39	<b>AF20</b>	10-100	
40	<b>AF21</b>	10-100	
39,40	<b>AF7</b>	20-200	20-200
41	<b>AF14</b>		30-300
41	<b>AF9</b>	100-1000	

µl volume ranges shown



		<b>H A M I L T O N</b>			
		Softgrip		Softouch Electronic	
		Channels		Channels	
		1	8,12	1	8,12
<b>Page/Tip Type</b>		<b>Aerosol Tips</b>			
37	<b>AF1</b>	0.2-2, 1-10		0.2-10	0.2-10
38	<b>AF3</b>	2.5-25			
38	<b>AF4</b>		5-50		
39	<b>AF19</b>	10-100		5-100	
39	<b>AF18</b>	10-100		5-100	
38	<b>AF17</b>	10-100		5-100	
39	<b>AF20</b>	10-100		5-100	
38	<b>AF5</b>	10-100		5-100	
41	<b>AF14</b>		30-300		25-250
41	<b>AF9</b>	100-1000			
39,40	<b>AF7</b>	10-100			
41	<b>AF22</b>				50-1200



		<b>K E N D A L L</b>	
		Oxford Benchmate	
		Channels	
		1	
<b>Page/Tip Type</b>		<b>Aerosol Tips</b>	
37	<b>AF1</b>	0.5-10	
39,40	<b>AF7</b>	10-200, 20-200, 40-200	
40	<b>AF8</b>	10-200	
41	<b>AF9</b>	200-1000	

The most up to date versions of these charts are available at [www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)



# Aerosol Filter Tips Compatibility Chart — SOCOREX, VISTALAB

Other Pipettor Brands



## SO CORE X

µl volume  
ranges shown  
**µl**

Acura 825		Calibra 822	Calibra 825	Electro 925	Electro 955
Channels		Channels	Channels	Channels	Channels
1	8, 12	1	8, 12	1	8, 12

Page/Tip Type

Aerosol Tips

37	<b>AF1</b>	0.1-2, 0.5-10				0.5-10	0.5-10
37	<b>AF15</b>	1-10					
37	<b>AF2</b>		0.5-10	0.2-2, 1-10	1-10		
38	<b>AF3</b>	2-20					
38	<b>AF4</b>	5-50	5-50			2.5-50	2.5-50
39	<b>AF19</b>	10-100		10-100	10-100		
39	<b>AF18</b>	10-100		10-100	10-100		
38	<b>AF17</b>	10-100		10-100	10-100		
39	<b>AF20</b>	10-100		10-100	10-100		
39,40	<b>AF7</b>	20-200	20-200	20-200	20-200	10-200	
41	<b>AF14</b>		40-350				
41	<b>AF9</b>	100-1000		100-1000			



## VISTALAB

MLA	Ovation	Ovation Electronic	
Channels	Channels	Channels	
1	1	1	8, 12

Page/Tip Type

Aerosol Tips

37	<b>AF1</b>		1-10		
37	<b>AF15</b>			0.5-20	0.5-20
38	<b>AF4</b>	10-50			
39	<b>AF19</b>		10-100		
39	<b>AF18</b>		10-100		
38	<b>AF17</b>		10-100		
39	<b>AF20</b>		10-100		
38	<b>AF5</b>	10-50	10-100		
39,40	<b>AF7</b>	50-200	20-200, 40-200		
41	<b>AF14</b>		20-200, 40-200		
40	<b>AF8</b>	50-200	20-200		
41	<b>AF9</b>		100-1000*		

The most up to date versions  
of these charts are available at  
[www.labcon.com/fitcharts](http://www.labcon.com/fitcharts)

\* requires Type A Nozzle Vistalab #9057-1016 100-1000µl, 201-1000µl

We designed our SuperClear™ centrifuge tubes to successfully meet your needs every time you use them. We test every lot of these tubes at a much higher g-force than we rate them to ensure that you can spin them safely. Our quality control team tests the seals with chloroform. So these don't just look like centrifuge tubes, they really are.



# CENTRIFUGATION

with ViewPoint™ Labeling Surface

Now 50 ml spins to 20,000 rcf



50ml mark indication



ViewPoint™ surface shows contents in tube clearly but labels easily



ViewPoint™ surface helps prevent smearing

SuperClear™ tubes offer you a standard of performance not available from other brands of centrifuge tubes. These tubes are made from a unique medical grade resin that is far more durable than commodity grade resins used in most other brands of tubes. This high quality resin makes it possible for you to spin these tubes at g-forces up to 233% greater than other tubes. So you can finally do those extractions you did in polycarbonate tubes before.

SuperClear™ tubes now feature the Patent Pending ViewPoint™ labeling areas that help reduce smearing of lab markers and also helps protect sample labeling from damage during procedures.

➤ You can order these tubes with either a flat cap with a two stage seal, or a plug style cap that includes a very deep sealing area. The flat style caps can be easily labeled and are designed to allow you to seal them to an evaporation seal with  $\frac{3}{4}$  turn for one-handed operation. And then a final  $\frac{1}{4}$  turn will seal them liquid tight. The plug style caps are virtually leak proof and are perfect for use with horizontal shakers or extended storage.



⚡ These tubes are printed using a high speed rotary process and reagent/chemical resistant inks that allow us to eliminate V.O.C. pollutants.

*SuperClear™ tubes are not only better when you use them, the process used to make them is better, helping reduce their environmental footprint.*



⚡ Each of these tubes is molded in a high energy efficiency electric molding machine that consumes up to 40% less energy.



➤ SuperClear™ tubes are made using unique “waste free” machines that produce no plastic waste.

SuperClear™ tubes are available in packaging styles for all your needs, including our Patented fiber racks, Sterile bags, and Bulk bags. All our sterile products use medical grade packaging and are radiation sterilized following a validated ISO 11137 method.



# CENTRIFUGATION

with ViewPoint™ Labeling Surface



Labcon tubes are made using the highest quality molds and exacting production standards.

Comparison photo (below) of 50mL tube cones shows thicker cones of SuperClear tubes (far right, Teal) withstand breakage better than popular brands. Actual test with market samples. Tubes filled with 45mL distilled water. Spun unsupported for 15 minutes @ 20,000 RCF.

Item	Material	Autoclavable*	Max RCF**	Temp Range***
15mL Printed Tube	Polypropylene	✓	17,000	-90° to 122 °C
50mL Printed Tube	Polypropylene	✓	20,000	-90° to 122 °C

\* 15mL and 50mL caps are not autoclavable separately from tubes.

\*\* RCF is Relative Centrifugal Force as measured in G's for specific gravity of 1.0. Always use appropriate cushion or adapters and biohazard containment precautions. Organic solvents and other strong chemicals may reduce maximum RCF. Printed graduations are accurate to ±5%.

\*\*\* Maximum storage temperatures. Use of polyfoam or other type of insulating racks that cause uneven cooling may cause breakage. Use of organic solvents, multiple spin cycles, vortexing, or other procedures may reduce maximum freezing temperature. Tubes should be allowed to come to room temperature before any procedures.



Thicker Labcon tubes withstand higher g-forces

# CENTRIFUGATION

## SuperClear™ 15mL and 50mL Centrifuge Tubes

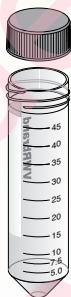
Low profile cap design allows tubes to be stored in racks without crowding

Easy grip cap design is simple to use even when wearing gloves

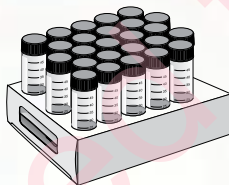
Tubes from major brands offer fewer features than Labcon

Extra large labeling area

Clear black graduations and volumes



50mL



50mL tubes  
25 per rack

50mL Tube Dimensions:  
Overall length: 115mm  
Inside diameter: 25mm  
Outside diameter: 29mm

### 50mL SuperClear Centrifuge Tubes with Flat Caps and Printed Graduations

Item	Package	Qty/Pk	Sterile	Qty/Cs
3181-340	50/Bag, 10 Bags/Case	50		500
3181-345	50/Bag, 10 Bags/Case	50	✓	500
3191-330	25/Rack, 20 Racks/Case	25		500
3191-335	25/Rack, 20 Racks/Case	25	✓	500
3191-870	Bulk, Tubes & Caps in Separate Bags	500		500

### 50mL SuperClear Centrifuge Tubes with Plug Style Caps and Printed Graduations

Item	Package	Qty/Pk	Sterile	Qty/Cs
3182-340	50/Bag, 10 Bags/Case	50		500
3182-345	50/Bag, 10 Bags/Case	50	✓	500
3192-330	25/Rack, 20 Racks/Case	25		500
3192-335	25/Rack, 20 Racks/Case	25	✓	500
3192-870	Bulk, Tubes & Caps in Separate Bags	500		500



Patented racks fold flat for recycling.



15mL



15mL tubes  
25 per rack, 2 racks/pkg.

15mL Tube Dimensions:  
Overall length: 118mm  
Inside diameter: 15mm  
Outside diameter: 17mm

### 15mL SuperClear Centrifuge Tubes with Flat Caps and Printed Graduations

Item	Package	Qty/Pk	Sterile	Qty/Cs
3131-340	50/Bag, 10 Bags/Case	50		500
3131-345	50/Bag, 10 Bags/Case	50	✓	500
3141-330	25/Rack, 2 Racks/Pkg, 10 Pkg/Cs	50		500
3141-335	25/Rack, 2 Racks/Pkg, 10 Pkg/Cs	50	✓	500
3141-870	Bulk, Tubes & Caps in Separate Bags	500		500

### 15mL SuperClear Centrifuge Tubes with Plug Style Caps and Printed Graduations

Item	Package	Qty/Pk	Sterile	Qty/Cs
3132-340	50/Bag, 10 Bags/Case	50		500
3132-345	50/Bag, 10 Bags/Case	50	✓	500
3142-330	25/Rack, 2 Racks/Pkg, 10 Pkg/Cs	50		500
3142-335	25/Rack, 2 Racks/Pkg, 10 Pkg/Cs	50	✓	500
3142-870	Bulk, Tubes & Caps in Separate Bags	500		500



1.

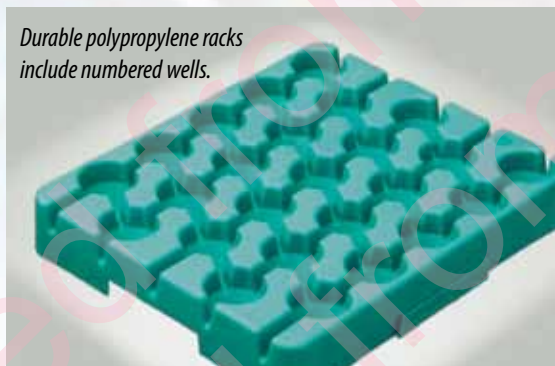
### 15mL and 50mL Sterile Centrifuge Tubes

PerformR™ Centrifuge tubes are designed for your everyday centrifugation and storage needs. These tubes include large white solvent resistant labeling areas and black easy to read graduations. They are available with either a flat cap that is easy to label or a plug style cap for horizontal applications. All package versions are sterilized with a validated and approved ISO 11137 method.

Racked tubes are packaged in a reusable, autoclavable, and freezable (-80°C) polypropylene rack that inter-locks to allow you to create a workstation.

Racks available separately, see page 76.

Durable polypropylene racks include numbered wells.



### 1. 50mL PerformR™ Centrifuge Tubes with Flat Caps

Item	Package	Qty/Pk	Sterile	Qty/Cs
3186-345	50/Bag, 10 Bags/Case	50	✓	500
3196-335	25/Rack, 20 Racks/Case	25	✓	500



### 50mL PerformR™ Centrifuge Tubes with Plug Style Caps

Item	Package	Qty/Pk	Sterile	Qty/Cs
3187-345	50/Bag, 10 Bags/Case	50	✓	500
3197-335	25/Rack, 20 Racks/Case	25	✓	500

### 15mL PerformR™ Centrifuge Tubes with Flat Caps

Item	Package	Qty/Pk	Sterile	Qty/Cs
3136-345	50/Bag, 10 Bags/Case	50	✓	500
3146-335	25/Rack, 2 Racks/Pkg, 10 Pkg/Cs	50	✓	500



### 15mL PerformR™ Centrifuge Tubes with Plug Style Caps

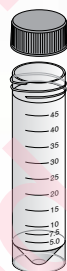
Item	Package	Qty/Pk	Sterile	Qty/Cs
3137-345	50/Bag, 10 Bags/Case	50	✓	500
3147-335	25/Rack, 2 Racks/Pkg, 10 Pkg/Cs	50	✓	500



2.



Freestanding 50mL



### 50mL Freestanding Centrifuge Tubes

Freestanding 50mL Centrifuge Tubes are available for use in those applications where a rack is not available. They include a large white solvent resistant writing area and black graduations. Available with either a flat cap or a plug style cap.

Certified to IATA 95kPa Standard

### 2. Freestanding 50mL Centrifuge Tubes with Flat Caps

Item	Package	Qty/Pk	Sterile	Qty/Cs
3095-340	50/Bag, 10 Bags/Case	50		500
3095-345	50/Bag, 10 Bags/Case	50	✓	500
3095-870	Bulk, Tubes & Caps in Separate Bags	500		500

### Freestanding 50mL Centrifuge Tubes with Plug Style Caps

Item	Package	Qty/Pk	Sterile	Qty/Cs
3094-340	50/Bag, 10 Bags/Case	50		500
3094-345	50/Bag, 10 Bags/Case	50	✓	500
3094-870	Bulk, Tubes & Caps in Separate Bags	500		500

# CENTRIFUGATION

## Centrifuge Tubes for Special Applications



1.

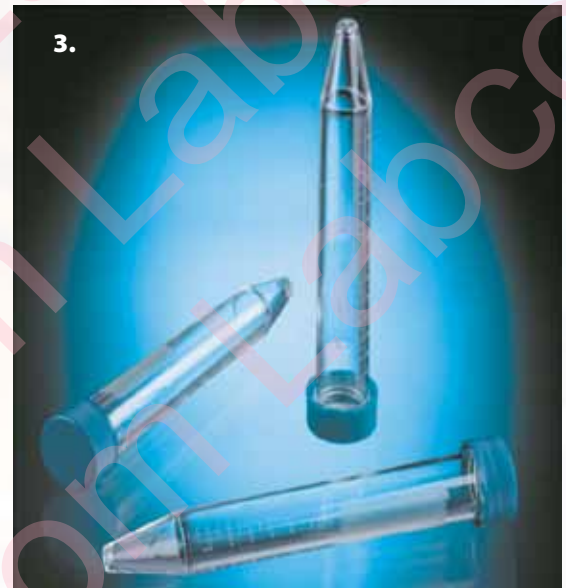
### 1. Metal Free\* Centrifuge Tubes

Our Metal Free tubes are made with ultra clean resins for the tube and cap and processed to ensure that common trace metals are kept below an ICP-MS detection level of one part per billion. These tubes are perfect for storage of samples and for applications requiring the assurance of low background metals. Available in sterile racks or bags. Metals included in testing are Calcium, Magnesium, Zinc, Iron, Manganese, Copper, Aluminum, Silicon, Nickel, Vanadium, Sodium, Phosphorus, Cobalt, Chromium, Potassium, Lithium, and Lead. Autoclavable (122°C) and freezable (-80°C).



2.

**Amber 15mL and 50mL Centrifuge tubes for light sensitive samples**



3.

### 1. Metal Free\* 50mL Centrifuge Tubes

with Flat Caps



### Metal Free\* 15mL Centrifuge Tubes

with Flat Caps

Item	Package	Qty/Pk	Sterile	Qty/Cs
3184-345	50/Bag, 10 Bags/Case	50	✓	500
3194-335	25/Rack, 20 Racks/Case	50	✓	500

Item	Package	Qty/Pk	Sterile	Qty/Cs
3134-345	50/Bag, 10 Bags/Case	50	✓	500
3144-335	25/Rack, 2 Racks/Pkg, 10 Pkg/Cs	50	✓	500

\* Certified to less than 1PPB for major metals

### 2. UVsafe™ Amber 50mL Centrifuge Tubes

with Plug Style Caps



### UVsafe™ Amber 15mL Centrifuge Tubes

with Plug Style Caps

Item	Package	Qty/Pk	Sterile	Qty/Cs
3182-445	50/Bag, 10 Bags/Case	50	✓	500
3192-435	25/Rack, 20 Racks/Case	50	✓	500
3192-871	Bulk, Tubes & Caps in Separate Bags	50		500

Item	Package	Qty/Pk	Sterile	Qty/Cs
3132-445	50/Bag, 10 Bags/Case	50	✓	500
3132-435	25/Rack, 2 Racks/Pkg, 10 Pkg/Cs	50	✓	500
3132-871	Bulk, Tubes & Caps in Separate Bags	50		500

### 3. 15mL Polystyrene Centrifuge Tubes

with External Molded Graduations



Item	Package	Qty/Pk	Sterile	Qty/Cs
3130-340	50/Bag, 10 Bags/Case	50		500
3130-345	50/Bag, 10 Bags/Case	50	✓	500
3128-350	125/Bag, 4 Bags/Case	50		500
3128-355	125/Bag, 4 Bags/Case	50	✓	500
3115-870	Bulk, Tubes & Caps in Separate Bags	50		500

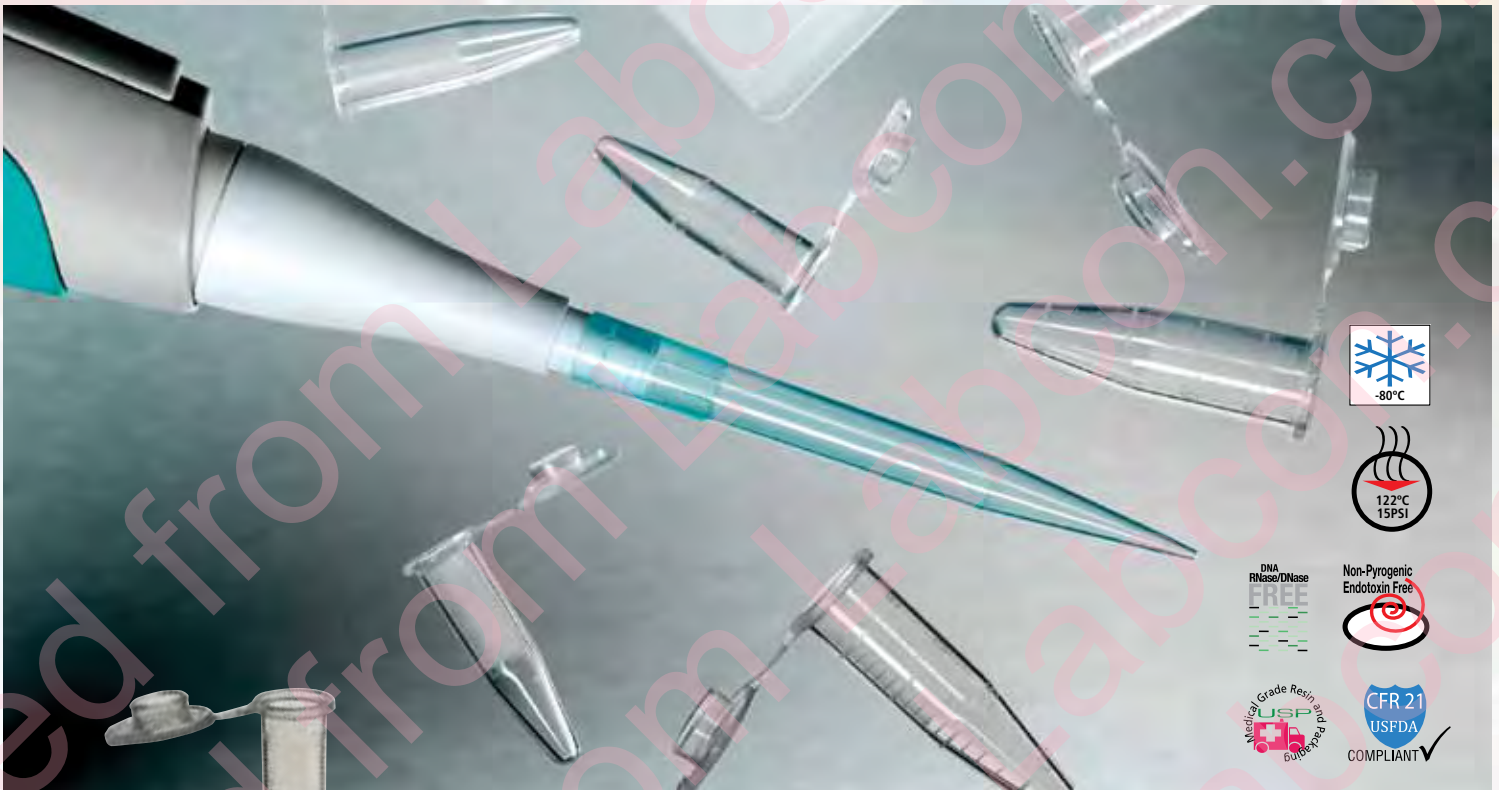
### 2. UVsafe™ Amber 15mL and 50mL Centrifuge tubes for Light Sensitive samples.

These tubes are designed to block 100% of U.V. light. They can be used instead of foil to shield samples sensitive to light radiation. They have been lab tested and certified to block U.V. light, but will still pass visible light so you can see your sample volume. Autoclavable (122°C) and Freezable (-80°C).

### 3. Polystyrene centrifuge Tubes.

Polystyrene tubes are made of crystal clear resin and bold etched graduations. They can be used for some culture applications that require a glass clear material. Not autoclavable or freezable.





**I**  
Spins to:  
**20,000**  
RCF

1.7mL

**1.7mL SuperClear™ Polypropylene Microcentrifuge Tubes**  
with Extra Large Top and Graduations.  
Spins to 20,000 RCF. Autoclavable.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3012-870	Natural	500		5,000
3012-874	Red	500		5,000
3012-873	Orange	500		5,000
3012-872	Yellow	500		5,000
3012-878	Green	500		5,000
3012-877	Blue	500		5,000
3012-876	Purple	500		5,000
3012-879	Assorted	500		5,000

2.0mL with graduations

**H**

Spins to:  
**20,000**  
RCF

**2.0mL SuperClear™ Polypropylene Microcentrifuge Tubes**  
with Graduations. Tubes have frosted side labeling surface a thin membrane cap that can be pierced easily by a syringe. Resealable bag. Spins to 20,000 RCF. Autoclavable.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3046-870	Natural	500		5,000
3046-874	Red	500		5,000
3046-873	Orange	500		5,000
3046-872	Yellow	500		5,000
3046-878	Green	500		5,000
3046-877	Blue	500		5,000
3046-876	Purple	500		5,000
3046-871	Amber (for light sensitive samples)	500		5,000
3046-879	Assorted	500		5,000

0.5mL

**E**

Spins to:  
**14,000**  
RCF

**0.5mL Superslik™ Polypropylene Microcentrifuge Tubes**  
with Low Protein Binding surface. Include flat caps and writing surface. In resealable bags.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3025-570	Natural	500		5,000

1.5mL

**F**

**1.5mL Superslik™ Polypropylene Microcentrifuge Tubes**  
with Low Protein Binding surface. Include flat caps and writing surface. In resealable bags.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3039-560	Natural	250		2,500

1.7mL

**G**

Spins to:  
**15,000**  
RCF

**1.7mL SuperClear™ Polypropylene Microcentrifuge Tubes**  
In sterile packaging. Spin to 15,000 RCF.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3034-335	Natural, Bag	500	✓	5,000

**Cap Opener for 0.5, 0.65, 1.5, 1.7 and 2.0mL Snap Top Microcentrifuge Tubes** Autoclavable. Polypropylene.

Item	Description	Qty/Pk	Sterile	Qty/Cs
2910-840	Opener, Teal	5		50



# CENTRIFUGATION

## SuperSpin™ Microcentrifuge Tubes with EasyOpen Caps

SuperSpin™ tubes feature an extra thick and durable wall that can withstand centrifugation to 40,000 x G\*. The ultra clear polypropylene resin gives you a clear view of the pellet as well as correct color rendition. Designed with ergonomic caps and smooth surfaces that make this tube easy to open and can help reduce the potential for repetitive strain injury. The cap also includes a special 90° hinge that self-aligns the cap and makes it easier to close while one-handed pipetting. Available in 1.5mL sizes that fit all standard and high capacity rotors. Tubes have flat piercable caps and a side writing surface. Autoclavable and freezable. In resealable bags. Graduated.

The ability to extract DNA from samples and then amplify that DNA with reliable results is an important part of lab work. SuperSpin™ tubes were designed with this in mind. They can be trusted to spin at high rates. They can be opened and closed easily many times to add or remove reagents. The interior surfaces are ultra-smooth with low retention. They are clear enough to be used in a spectrophotometer and have no extractables at the wavelength ranges you use to detect DNA. The chart below details the performance of SuperSpin™ tubes in light transmission compared to popular brands. SuperSpin™ tubes are more than twice as effective at transmitting light than most brands of micro centrifuge tubes.



- Ultra high centrifuging to 40,000 x G\*\*
- Optically clear resin
- Resin will not interfere with DNA or PCR\*
- For Phenol/Chloroform vortexing
- Reduced Thumb Force



**1.5mL SuperSpin™ Polypropylene Micro Centrifuge Tubes**  
with flat caps, writing surface and graduations. Resealable bags.



Item	Description	Qty/Pk	Qty/Cs
3016-870	Natural	500	5000
3016-874	Red	500	5000
3016-873	Orange	500	5000
3016-872	Yellow	500	5000
3016-878	Green	500	5000
3016-877	Blue	500	5000
3016-876	Purple	500	5000
3016-871	Amber (for light sensitive samples)	500	5000
3016-879	Rainbow	500	5000

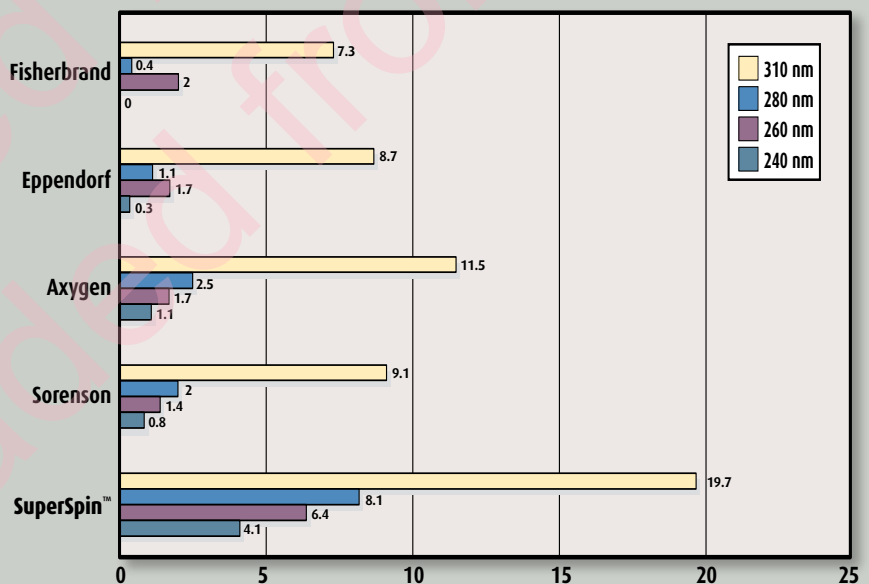
Rainbow package includes: 100 red, blue, green, yellow, orange in separate 100 tube bags

### PCR\*/DNA Range Light Transmission

The chart shows the results of a study comparing the light transmission ability of some popular brands of micro centrifuge tubes in the PCR\*/DNA range.

In this study one tube from every brand was placed into a spectrophotometer. The percent transmission of light at the wavelengths shown was compared to an empty chamber. The results are shown below. Samples were from purchased market samples.

\* PCR is a patented process of Hoffman-LaRoche. Use of the PCR process requires a license.



\*\* Maximum G-force can be affected by organic solvents, multiple spin cycles, or low temperature storage. See chart on page 65.

SuperSpin™ tubes were developed by selecting all the best features of existing microcentrifuge tubes and adding to them the features end users have been asking for. This resulted in tubes with tremendous value. As you can see from the tests below SuperSpin™ tubes surpass the performance of all major brands of tubes. These are not only tubes that can be spun fast, these are tubes that are pure. Every lot of SuperSpin™ tubes is tested and guaranteed free of RNase and DNase. And since SuperSpin™ tubes are made with our pre-tested medical grade resin we know you can use these tubes for DNA extraction without worrying about contaminating your sample.

### SuperSpin™ features:



Bottom designed with no sharp points to tear gloves



Beveled opening for pouring supernatant



Smooth rounded cap closure won't catch your gloves



Ultra smooth surface polish improves fluid removal



Flat cap can be easily labeled



Slim design fits high capacity rotors



Every lot is free from nuclease



Unique 90° hinge orients cap for easy fit.



Cap designed to be easy to open and close.

### Extractables of Microcentrifuge Tubes

Procedure: 8 tubes of each brand were filled with 1ml of TE buffer. The tubes were then placed in an incubator at 57°C for 24 hours. After this incubation, the TE from 4 of the 8 tubes from each brand was pooled and light absorbance was measured against reference TE in a Perkin-Elmer Lambda 3B Spectrophotometer.

240 nm	260 nm	280 nm	310 nm
-0.011	-0.014	-0.014	-0.014
-0.012	-0.018	-0.018	-0.018
-0.012	-0.016	-0.016	-0.016

Brand E

240 nm	260 nm	280 nm	310 nm
0.001	0.001	-0.005	-0.008
-0.002	-0.003	-0.011	-0.015
-0.001	-0.001	-0.008	-0.012

SuperSpin™

### Microcentrifuge Tube Centrifugation

This study was designed to compare the ability of popular brands of micro centrifuge tubes to withstand centrifuging.

For this study 12 tubes from every brand were filled with distilled water and placed into a high speed centrifuge. These tubes were sequentially spun at the speeds shown in the chart. The results are shown below. Samples were from purchased market samples.

#### KEY:

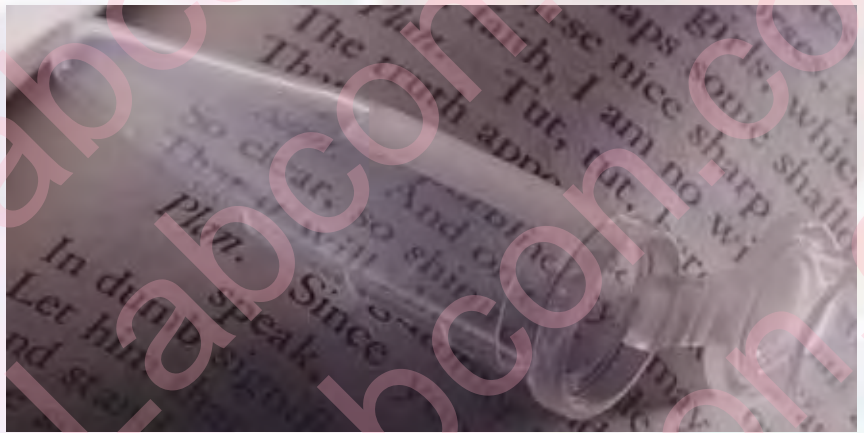
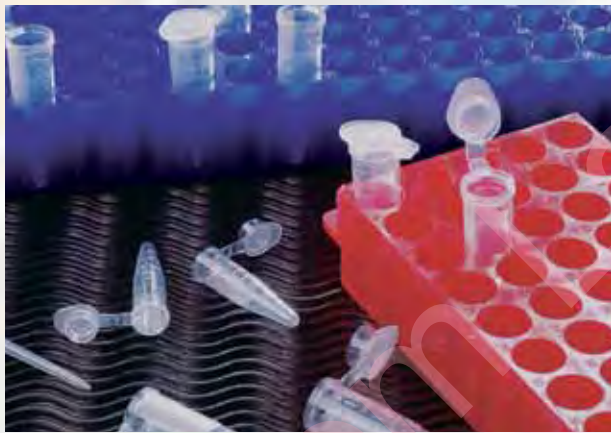
- No change
- Minor bulging or bending
- Crazing or minor cracking
- Major bulge or deformation
- Break

Test	Reaction	Brand F	Brand E	Brand A	Brand S	SuperSpin™
30,000 4°C 10 minutes		12	12	12	12	12
35,000 18°C 10 minutes		12	12	12	12	12
40,000 18°C 10 minutes		6			1	
		1			1	12
		5	12		9	
					1	
42,500 18°C 10 minutes		1				
					2	12
		11	12		9	
					1	
45,000 18°C 10 minutes						
						12
		12	8		1	
			3		11	
50,000 18°C 10 minutes						
						10
		10				
		2				1
						1

Tube Centrifugation Results

# CENTRIFUGATION

## SuperClear™ Microcentrifuge Tubes with Boilproof† Caps



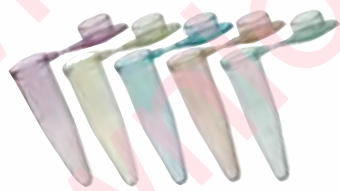
SuperClear™ tubes feature an ultra clear polypropylene resin that gives you a clear view of the pellet as well as correct color rendition. Designed to be sustainable, these tubes use 50% less plastic than most other tubes and include ergonomic caps with smooth surfaces that can help reduce the potential for repetitive strain injury. The cap also includes a special 90° hinge that makes the cap easier to close while one handed pipetting. And these tubes are designed to stay closed during boiling to protect your sample.

Available in 0.65mL and 1.7mL sizes that fit all standard and high capacity rotors. 0.65 ml tubes can also be used in many PCR\* Thermocyclers. Tubes have flat pierceable caps, a side writing surface and graduations. Autoclavable and freezable.



Maximum G-force and acceptable use can be affected by organic solvents, multiple spin cycles, low temperature storage, or vortexing. Always run a trial before using centrifuge tubes in your procedure. Make sure appropriate cushions, adapters and biohazard containment is in place before proceeding.

- Optically clear resin
- Resin will not interfere with DNA or PCR\*
- Significantly less waste



\* Rainbow pack includes:  
Red, Yellow, Orange, Green and Blue in separate bags.

† When boiled in water bath.



**0.65mL SuperClear™ Polypropylene Micro Centrifuge Tubes** with flat caps, writing surface and graduations. Resealable bags.

Item	Description	Qty/Pk	Qty/Cs
3023-800	Natural	1000	10,000
3023-804	Red	1000	10,000
3023-803	Orange	1000	10,000
3023-802	Yellow	1000	10,000
3023-808	Green	1000	10,000
3023-807	Blue	1000	10,000
3023-806	Purple	1000	10,000
3023-809	Rainbow	1000	10,000



**1.7mL SuperClear™ Polypropylene Micro Centrifuge Tubes** with flat caps, writing surface and graduations. Resealable bags. Not for vortexing.

Item	Description	Qty/Pk	Qty/Cs
3013-870	Natural	500	5,000
3013-874	Red	500	5,000
3013-873	Orange	500	5,000
3013-872	Yellow	500	5,000
3013-878	Green	500	5,000
3013-877	Blue	500	5,000
3013-876	Purple	500	5,000
3013-879	Rainbow	500	5,000



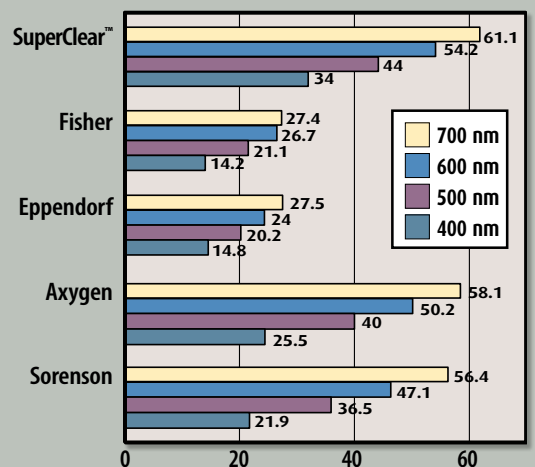
**1.7mL SuperClear™ Polypropylene Micro Centrifuge Tubes** without caps. Resealable bags. Not for vortexing.

Item	Description	Qty/Pk	Qty/Cs
3033-870	Natural	500	5,000
3033-874	Red	500	5,000
3033-873	Orange	500	5,000
3033-872	Yellow	500	5,000
3033-878	Green	500	5,000
3033-877	Blue	500	5,000
3033-876	Purple	500	5,000
3033-879	Rainbow	500	5,000

### Visible Range Light Transmission

The chart shows the results of a study comparing the visible light transmission ability of some popular brands of micro centrifuge tubes.

In this study one tube from every brand was placed into a spectrophotometer. The percent transmission of light at the wavelengths shown was compared to an empty chamber. The results are shown below. Samples were from purchased market samples.



\* PCR\* is a patented process of Hoffman-LaRoche. Use of the PCR\* process requires a license.

# CENTRIFUGATION

## Microcentrifuge Tube Selection Guide

Microcentrifuge tubes are used in the lab everyday. You use dozens of them. You never think about them, you shouldn't have to.

We know that you expect a lot from one of the most necessary items in your lab. What you put into them is your time, your ideas, and your passion. We spin test thousands of tubes every day. We use resins that are clearer and cleaner, we run a series of nuclease tests on every production lot of tubes after they are packaged not just after they are molded. We test thoroughly as part of our regular quality control process because we understand how important your work is.

Use this chart to help choose the right tube for your application. Look for letters **A** next to the products on the following pages for references to this chart.



	STYLE:	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>
	PRODUCT #	3016	3023	3013	3033	3025	3039	3038	3046	3012
<b>PROCESS</b>										
DNA extraction		◆				◆	◆	◆		
DNA quantification		◆	◆	◆						
PCR* thermo cycling			◆	◆						
PCR* prep		◆	◆	◆	◆					
Vortexing		◆	◆				◆	◆	◆	
Boiling			◆	◆			◆	◆		◆
Freezing to -80° C		◆	◆	◆	◆	◆	◆			
Centrifuging to <14,000 x g		◆	◆	◆	◆	◆	◆		◆	
Centrifuging >14,000 <20,000 x g		◆	◆					◆		◆
Centrifuging >20,000 <45,000 x g		◆								
Sequential centrifuging to 40,000 x g		◆								
Viscous protein mixing <14,000 x g		◆						◆		
Viscous protein mixing >14,000 <40,000 x g		◆								
Refrigerated centrifugation to 0° C		◆	◆	◆	◆	◆	◆			◆
Multiple reagent addition		◆	◆							
Medical lab processing						◆			◆	◆
Single use procedure				◆						
Phenol/Chloroform extraction		◆						◆	◆	◆

# CENTRIFUGATION

## SuperClear™ Screw Cap Microcentrifuge Tubes



### SuperClear™ Screw Cap Microcentrifuge Tubes with Universal Fit Caps

- Ultra clear resin
- 0.5, 1.5, 2.0mL sizes
- Resealable bags
- Low profile caps with universal threads



SuperClear™ Screw Cap Microcentrifuge Tubes are made from an ultra clear resin that gives you an excellent view of tube contents. These tubes include universal screw threads that will work with all major brands of caps. Caps include an ethylene propylene O-ring seal for secure storage. Caps and tubes are autoclavable and freezable. Sterile tubes are radiation sterilized. Tubes can be centrifuged to 20,000 RCF. 1.5mL, 2.0mL, and Freestanding 2.0mL tubes include etched graduations. 0.5mL and Freestanding 0.5mL and 1.5mL are not graduated but have smooth outer walls for ease of labeling.



### Microcentrifuge Tubes with Natural Color Caps in Separate Resealable Bags

500 tubes, 500 caps/package.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3631-870	0.5mL	500		5,000
3641-870	0.5mL freestanding	500		5,000
3611-870	1.5mL*	500		5,000
3651-870	1.5mL freestanding	500		5,000
3661-870	2.0mL*	500		5,000
3621-870	2.0mL freestanding*	500		5,000

### Sterile Microcentrifuge Tubes with Attached Natural Color Caps

50 tubes in each sterile bag, 10 bags/package.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3631-875	0.5mL	500	✓	5,000
3641-875	0.5mL freestanding	500	✓	5,000
3611-875	1.5mL*	500	✓	5,000
3651-875	1.5mL freestanding	500	✓	5,000
3661-875	2.0mL*	500	✓	5,000
3621-875	2.0mL freestanding*	500	✓	5,000

### Microcentrifuge Tubes Only in Resealable Bags

500 tubes/bag

Item	Description	Qty/Pk	Sterile	Qty/Cs
3630-870	0.5mL	500		5,000
3640-870	0.5mL freestanding	500		5,000
3610-870	1.5mL*	500		5,000
3650-870	1.5mL freestanding	500		5,000
3660-870	2.0mL*	500		5,000
3620-870	2.0mL freestanding*	500		5,000

### Caps Only in Resealable Bags

500 caps/bag

Item	Description	Qty/Pk	Sterile	Qty/Cs
3600-870	Natural	500		5,000
3600-874	Red	500		5,000
3600-873	Orange	500		5,000
3600-872	Yellow	500		5,000
3600-878	Green	500		5,000
3600-877	Blue	500		5,000
3600-876	Purple	500		5,000
3600-871	White	500		5,000
3600-879	Assorted	500		5,000

\* Include etched graduations and writing surfaces.

# CENTRIFUGATION

## SuperClear™ Screw Cap Microcentrifuge Tubes with Silicone O-Ring Caps



SuperClear™ Screw Cap Microcentrifuge Tubes are ideal for any sample processing application. Excellent for frozen storage or when working with hazardous or valuable materials. O-rings are made from silicone to insure a leakproof seal and caps accept color coding inserts. Polypropylene loop caps are available to keep caps tethered to tubes. Sterile tubes are gamma irradiated and are packed 50 in a bag and 10 bags in a pack. Tubes and O-ring caps are autoclavable. Tubes can be centrifuged to 20,000 RCF.

With Silicone O-Ring Caps

### Tubes with Clear Caps in Separate Resealable Bags

500 tubes, 500 caps  
in separate bags per pack

Item	Description	Qty/Pk	Sterile	Qty/Cs
3634-870	0.5mL	500		5,000
3644-870	0.5mL freestanding	500		5,000
3614-870	1.5mL*	500		5,000
3654-870	1.5mL freestanding	500		5,000
3664-870	2.0mL*	500		5,000
3624-870	2.0mL freestanding*	500		5,000

### Sterile Tubes with Attached Clear Caps

50 tubes and caps per bag,  
10 bags per pack

Item	Description	Qty/Pk	Sterile	Qty/Cs
3634-875	0.5mL	500	✓	5,000
3644-875	0.5mL freestanding	500	✓	5,000
3614-875	1.5mL*	500	✓	5,000
3654-875	1.5mL freestanding	500	✓	5,000
3664-875	2.0mL*	500	✓	5,000
3624-875	2.0mL freestanding*	500	✓	5,000

### Tubes with Clear Loop Style Caps

500 tubes, 500 caps  
in separate bags per pack

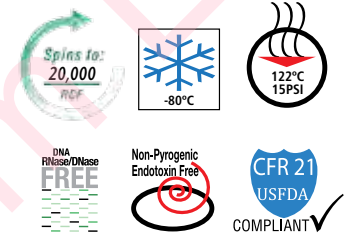
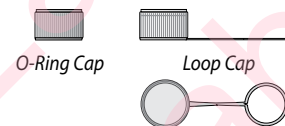
Item	Description	Qty/Pk	Sterile	Qty/Cs
3636-870	0.5mL	500		5,000
3646-870	0.5mL freestanding	500		5,000
3616-870	1.5mL*	500		5,000
3656-870	1.5mL freestanding	500		5,000
3666-870	2.0mL*	500		5,000
3626-870	2.0mL freestanding*	500		5,000

### Sterile Tubes with Clear Loop Style Caps

50 tubes and caps per bag,  
10 bags per pack

Item	Description	Qty/Pk	Sterile	Qty/Cs
3636-875	0.5mL	500	✓	5,000
3646-875	0.5mL freestanding	500	✓	5,000
3616-875	1.5mL*	500	✓	5,000
3656-875	1.5mL freestanding	500	✓	5,000
3666-875	2.0mL*	500	✓	5,000
3626-875	2.0mL freestanding*	500	✓	5,000

\* Include etched graduations and writing surfaces.



### Cap Color Code Inserts 100 per bag, 500 per case

Item	Description	Qty/Pk	Sterile	Qty/Cs
3605-840	Natural	100		500
3605-841	White	100		500
3605-842	Yellow	100		500
3605-843	Orange	100		500
3605-844	Red	100		500
3605-846	Purple	100		500
3605-847	Blue	100		500
3605-848	Green	100		500
3605-849	Assorted	100		500

# MOLECULAR BIOLOGY

Our disposables for PCR\* are not only tested to preclude the presence of RNase and DNase. Every lot is lab tested to ensure there is no Human DNA on any of the thermocycling supplies we offer you.

And since we operate our own microbiology lab we use our plates, strips, and tubes to test and validate all of our products. So consistency is not only important to you, it is important to us.

\*PCR\* is a patented process of Hoffman-LaRoche. Use of the PCR\* process requires a license.

Labcon PCR\* tubes, strips and plates are designed to fit many popular thermocyclers including brands like Applied Biosystems, Eppendorf, Thermo Scientific, and Bio Rad. All our PCR\* disposables are made from 100% virgin polypropylene and are lot tested and certified to be free of RNase, DNase, and Human DNA. Autoclavable.

PCR\* Workstation, see page 76.



### 0.2mL PCR\* Tubes with Attached Bubble Caps



Item	Description	Qty/Pk	Sterile	Qty/Cs
3934-500	Natural	1000		10,000
3934-502	Yellow	1000		10,000
3934-504	Red	1000		10,000
3934-506	Purple	1000		10,000
3934-507	Blue	1000		10,000
3934-508	Green	1000		10,000
3934-509	Assorted	1000		10,000

### 0.2mL PCR\* Tubes with Attached Flat Caps



Item	Description	Qty/Pk	Sterile	Qty/Cs
3936-500	Natural	1000		10,000
3936-502	Yellow	1000		10,000
3936-504	Red	1000		10,000
3936-506	Purple	1000		10,000
3936-507	Blue	1000		10,000
3936-508	Green	1000		10,000
3936-509	Assorted	1000		10,000

### 0.2mL PCR\* Strips with 8 wells



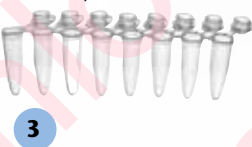
Item	Description	Qty/Pk	Sterile	Qty/Cs
3940-550	Natural	125		1,250
3940-552	Yellow	125		1,250
3940-554	Red	125		1,250
3940-556	Purple	125		1,250
3940-557	Blue	125		1,250
3940-558	Green	125		1,250
3940-559	Assorted	125		1,250

### 0.2mL PCR\* Strips with 12 wells



Item	Description	Qty/Pk	Sterile	Qty/Cs
3950-540	Natural	80		800
3950-542	Yellow	80		800
3950-544	Red	80		800
3950-546	Purple	80		800
3950-547	Blue	80		800
3950-548	Green	80		800
3950-549	Assorted	80		800

### 0.2mL Strips with 8 wells with Individually Attached Bubble Caps



Item	Description	Qty/Pk	Sterile	Qty/Cs
3925-550	Natural	120		1,200
3925-552	Yellow	120		1,200
3925-554	Red	120		1,200
3925-556	Purple	120		1,200
3925-557	Blue	120		1,200
3925-558	Green	120		1,200
3925-559	Assorted	120		1,200

### 0.2mL PCR\* Tubes with Attached Bubble Caps



Item	Description	Qty/Pk	Sterile	Qty/Cs
3926-550	Natural	125		1,250
3926-552	Yellow	125		1,250
3926-554	Red	125		1,250
3926-556	Purple	125		1,250
3926-557	Blue	125		1,250
3926-558	Green	125		1,250
3926-559	Assorted	125		1,250



### 0.2mL PCR\* Strips and Bubble Strip Caps Natural. Caps in separate bag.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3945-550	8 Wells	125		1,250
3955-540	12 Wells	80		800

### Bubble Strip Caps for PCR\* Strips Natural.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3942-850	for 8 Wells	125		1,250
3952-540	for 12 Wells	80		800

See  
Compatibility  
Chart on  
page 68

\*PCR\* is a patented process of Hoffman-LaRoche. Use of the PCR\* process requires a license.

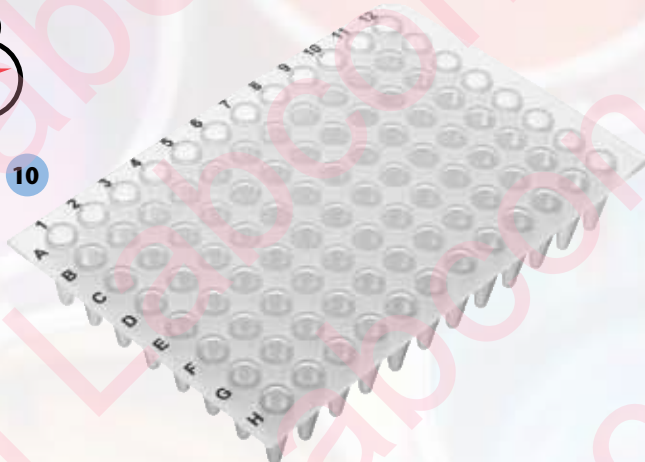
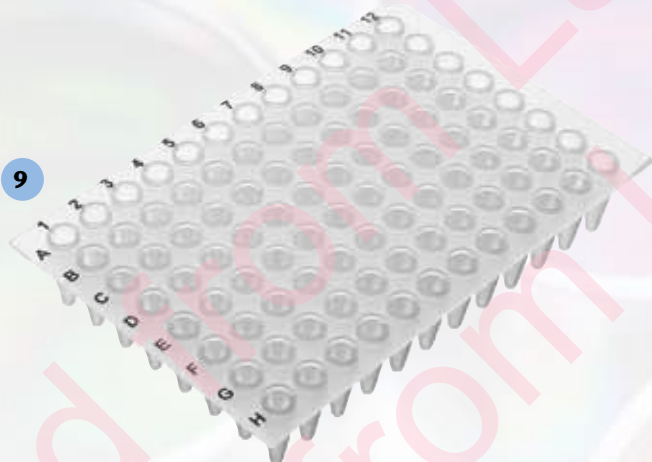


# MOLECULAR BIOLOGY

## PCR\* Plates

### DNA tested

Our 96 well, 0.2mL PCR\* plates are available in styles to fit most popular thermocyclers including Applied Biosystems 9600 and 9700, Bio Rad 1000 Series and others. Autoclavable. Lot tested and certified free of RNase, DNase and Human DNA. Polypropylene.



#### 96-Well PCR\* Plates

with printed Alpha Numeric Labeling

Item	Description	Qty/Pk	Sterile	Qty/Cs
3977-520	Natural	10		100
3977-522	Yellow	10		100
3977-524	Red	10		100
3977-526	Purple	10		100
3977-527	Blue	10		100
3977-528	Green	10		100
3977-529	Assorted	10		100

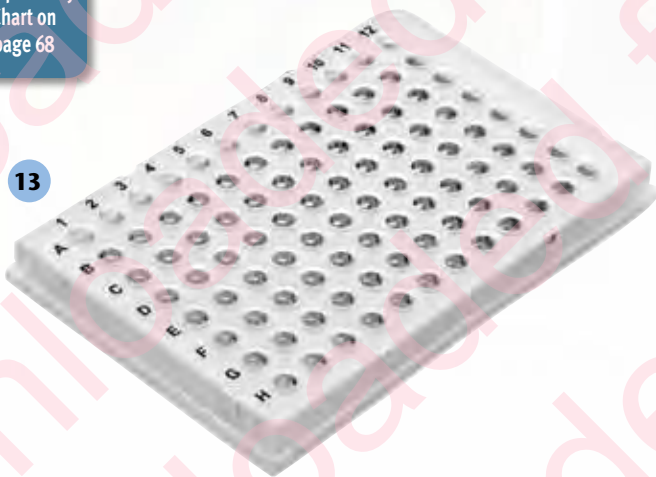
#### 96-Well Low Profile PCR\* Plates

with printed Alpha Numeric Labeling

(Low profile plates have smaller wells)

Item	Description	Qty/Pk	Sterile	Qty/Cs
3971-520	Natural	20		100
3971-522	Yellow	20		100
3971-524	Red	20		100
3971-526	Purple	20		100
3971-527	Blue	20		100
3971-528	Green	20		100
3971-529	Assorted	20		100

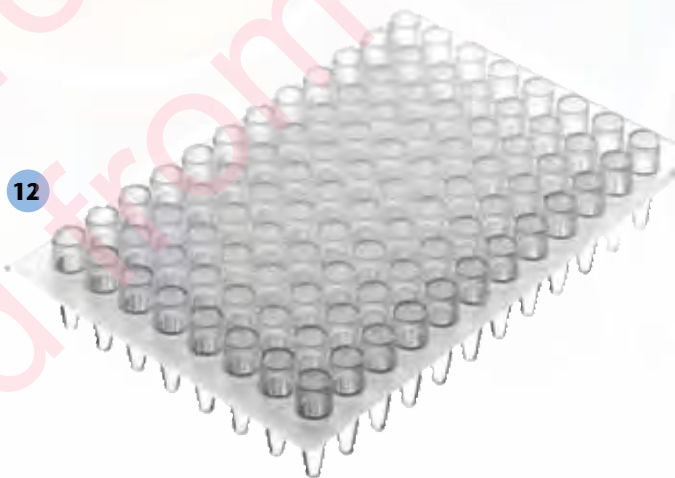
See Compatibility Chart on page 68



#### 96-Well Skirted PCR\* Plates

with printed Alpha Numeric Labeling

Item	Description	Qty/Pk	Sterile	Qty/Cs
3978-520	Natural	10		100
3978-522	Yellow	10		100
3978-524	Red	10		100
3978-526	Purple	10		100
3978-527	Blue	10		100
3978-528	Green	10		100
3978-529	Assorted	10		100



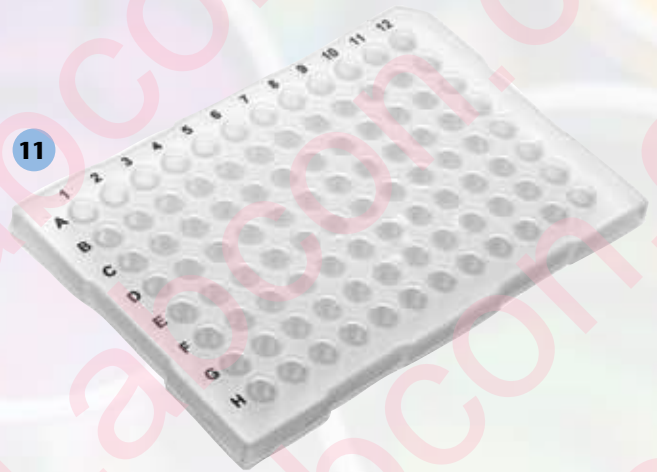
#### 96 High Well PCR\* Plates

(these can be sealed with strip caps on page 63)

Item	Description	Qty/Pk	Sterile	Qty/Cs
3974-520	Natural	10		100
3974-522	Yellow	10		100
3974-524	Red	10		100
3974-526	Purple	10		100
3974-527	Blue	10		100
3974-528	Green	10		100
3974-529	Assorted	10		100

\* PCR\* is a patented process of Hoffman-LaRoche. Use of the PCR\* process requires a license.

### DNA tested



**96-Well Half Skirt PCR\* Plates**  
with printed Alpha Numeric Labeling

Item	Description	Qty/Pk	Sterile	Qty/Cs
3973-520	Natural	10		100
3973-522	Yellow	10		100
3973-524	Red	10		100
3973-526	Purple	10		100
3973-527	Blue	10		100
3973-528	Green	10		100
3973-529	Assorted	10		100

**96-Well Low Profile Half Skirt PCR\* Plates**  
with printed Alpha Numeric Labeling

Item	Description	Qty/Pk	Sterile	Qty/Cs
3976-520	Natural	10		100
3976-522	Yellow	10		100
3976-524	Red	10		100
3976-526	Purple	10		100
3976-527	Blue	10		100
3976-528	Green	10		100
3976-529	Assorted	10		100

See Compatibility Chart on page 68



**96-Well Half Skirt PCR\* Plates, Raised Lip**  
with printed Alpha Numeric Labeling

Item	Description	Qty/Pk	Sterile	Qty/Cs
3979-520	Natural	10		100
3979-522	Yellow	10		100
3979-524	Red	10		100
3979-526	Purple	10		100
3979-527	Blue	10		100
3979-528	Green	10		100
3979-529	Assorted	10		100

**96-Well Half Skirt PCR\* Plates**  
for ABI style thermocyclers

Item	Description	Qty/Pk	Sterile	Qty/Cs
3972-520	Natural	10		100



\*PCR\* is a patented process of Hoffman-LaRoche. Use of the PCR\* process requires a license.

# MOLECULAR BIOLOGY

## PCR\* Plates, Mats and Film

### DNA tested

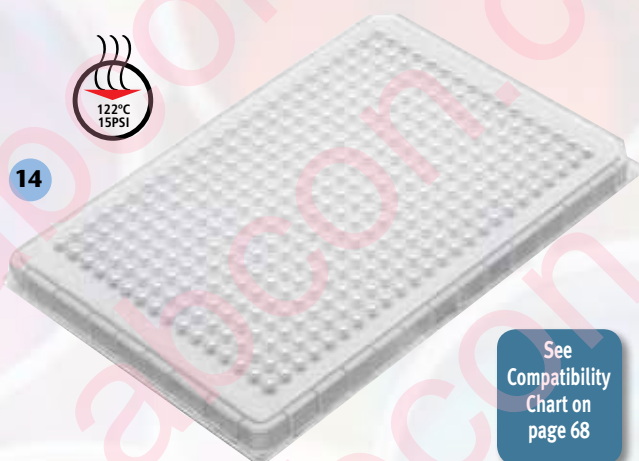
#### 384-Well PCR\* Plates

384-well PCR\* plates are made for high throughput thermocycling applications. These plates are flexible and skirted to allow bar coding. Each plate includes alpha numeric labeling with a frosted labeling area. Each well holds 25 µl and has smooth inner walls for rapid heat transfer. Slightly raised walls seal with films or foils. Autoclavable. Made of polypropylene.

#### 384-Well Skirted PCR\* Plates

with molded Alpha Numeric Labeling

Item	Description	Qty/Pk	Sterile	Qty/Cs
3983-520	Natural	10		100



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See  
Compatibility  
Chart on  
page 68

#### PCR\* Plate Sealing Mats and Film

Sealing mats and sealing film from Labcon are made to reduce evaporation when cycling plates. Reusable silicone mats fit most brands of 96-well PCR\* plates and can be cleaned and reused. Autoclavable at 121°C.

Sealing film is 3 mil polypropylene and has an adhesive backing that adheres to most PCR\* plates and has an operating temperature from -40 to 125°C.



#### 96-Well Silicone Sealing Mats

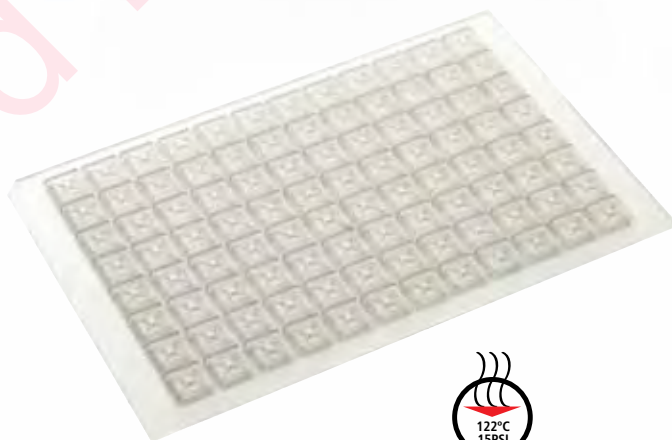
Natural.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3992-820	Round Wells	5		50
3994-520	Square Wells	5		50



#### Polypropylene Sealing Film

Item	Description	Qty/Pk	Sterile	Qty/Cs
3991-520	Film	100		1,200
3991-525	Film	100	✓	1,200

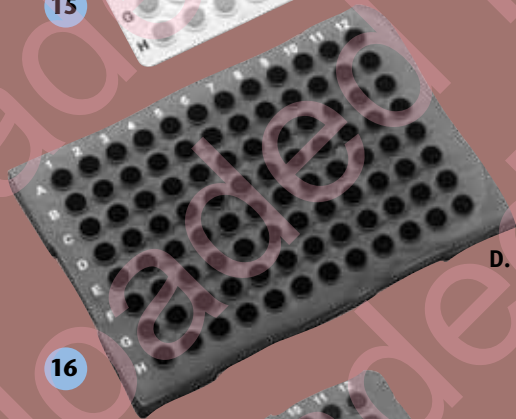


\* PCR\* is a patented process of Hoffman-LaRoche. Use of the PCR\* process requires a license.



15

C.



16

D.



17

E.

### Real Time PCR Disposables

These disposables for Real Time PCR\* thermocycling fit major thermocyclers that require an optically clear cover or cap to ensure proper functioning. Available as strips or in either white or black plates for those machines that use fluorescence to quantify processing. Plates are available in flat, skirted or semi skirted versions with dark printed alpha numeric references. Can be sealed with optically clear strip caps. Made of polypropylene.



18



F.

**A. 8-Well Strips**  
*with optically clear flat caps*

Item	Description	Qty/Pk	Sterile	Qty/Cs
3928-550	0.2mL Low Profile Strip	120		1200
3927-550	0.2mL Strip	120		1200

**B. 8-Well Strips**  
*w/optically clear flat cap strip*

Item	Description	Qty/Pk	Sterile	Qty/Cs
3929-550	0.2mL Strip	125		1250

**C. 0.2mL 96-Well Flat Real Time PCR Plates**

Item	Description	Qty/Pk	Sterile	Qty/Cs
3967-521	Black opaque	10		100
3967-520	White opaque	10		100

**D. 0.2mL 96-Well Plates with Half Skirts for ABI® style thermocyclers**

Item	Description	Qty/Pk	Sterile	Qty/Cs
3963-521	Black opaque	10		100
3963-520	White opaque	10		100

**E. 0.2mL 96-Well Skirted Real Time PCR Plates**

Item	Description	Qty/Pk	Sterile	Qty/Cs
3968-521	Black opaque	10		100
3968-520	White opaque	10		100

**F. Optically Clear Strip Caps for Real Time PCR**

Item	Description	Qty/Pk	Sterile	Qty/Cs
3951-850	0.2mL Strip	125		1250

\* PCR\* is a patented process of Hoffman-LaRoche. Use of the PCR\* process requires a license.

See  
Compatibility  
Chart on  
page 68

# MOLECULAR BIOLOGY

1 2 3 4 5 6 7 8 9 10 11 12 13 14 19

## PCR\* Disposables Compatibility Chart

See numbers next to PCR products on p. 63-66.

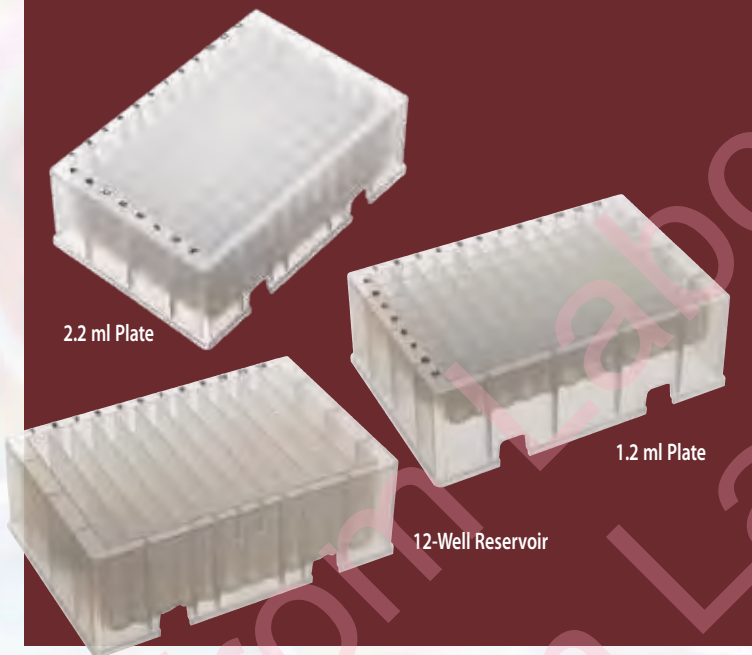
Thermocycler Brand		3934	3936	3925	3926	3945	3940	3955	3950	3977	3971	3973, 3976, 3979	3974	3978	3983	3972	
GENE TECHNOLOGIES	GS1	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	GS2	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	GS4	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	GS482	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
BIORAD	Genecycler	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Icycler	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	PTC-100	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	PTC-200	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	PTC-225	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	MJ Mini	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	MyCycler	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	DNA Engine	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	DNA Engine Dyad	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	DNA Engine Tetrad	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
EPPENDORF	Mastercycler	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Mastercycler Personal	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Mastercycler Gradient	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Mastercycler 384	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
ERICOMP	Singleblock	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Twinblock	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Deltacycler	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Deltacycler II	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Powerblock	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
APPLIED BIOSYSTEMS/ LIFE TECHNOLOGIES	2400	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	2700	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	2720	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	3100	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	3130	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	3700	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	3730	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	9600	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	9700	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Veriti 96 Well	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Dual 384	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	LABLINE	212	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
		214	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
225		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
226		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
227		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
MWG	Primus 25	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Primus 96	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Primus 384	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
ONCOR	Crocodile III	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
OPERON	OPR-PCR96	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
STRATAGENE	Robocycler 96	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
TAKARA	TP-240	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	TP-3000	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
TECHNE	Techgene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Touchgene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Cyclogene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Flexigene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Genius	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
THERMO HYBAID	Genius Quad	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	PCR Sprint	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	PCR Express	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	PxE	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Omnigene	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	MultiBlock	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	OMN-E	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
THERMOLYNE	Touchdown	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Amplifron II	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
WHATMAN BIOMETRA	Uno	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Uno II	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Ti Personal Cycler	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Ti	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Ti Plus	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	T3	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	
	Tgradient	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	

9 10 11 14 15 15 16 16 17 17 18 19

Real Time PCR Disposables on p.67.

Thermocycler Brand		VWR#	3977	3971	3976	3983	3967-520	3967-521	3963-521	3963-520	3968-520	3968-521	3927, 3928, 3929	3972
BIONEER	Exicycler													
BIORAD	Icycler	◆					◆	◆						
	iQ5											◆		
	MyiQ	◆					◆	◆						
	Chromo4										◆	◆		
EPPENDORF	Opticon2										◆	◆		
	Mastercycler ep Gradient	◆												
	Mastercycler ep Gradient S	◆												
INVITROGEN	Mastercycler ep 384				◆									
	7000			◆				◆	◆					
	7700	◆												
	7900HT			◆	◆				◆	◆				
	7300	◆											◆	
STRATAGENE	7500	◆											◆	
	MX3000P	◆									◆	◆		
	MX3005P	◆									◆	◆		
TECHNE	MX4000										◆	◆		
	Quantica		◆								◆	◆		

This information is believed to be true at the time of printing. However, instrument manufacturers routinely modify the designs of their products without notice. Please test the items above with the instrument shown before use.



### Deep Well Plates and Reservoirs

These heavy deep well plates feature printed alpha numeric labeling and smooth inside surfaces to ensure that all of your samples can be pipetted. They are designed to be manipulated by robots and can be autoclaved and sealed using film or mats. Freezable -80°C.



#### 96-Well Polypropylene Plates

Natural.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3905-520	2.2mL	10		100
3906-520	1.2mL	10		100

#### 12-Well Polypropylene Reservoir

Item	Description	Qty/Pk	Sterile	Qty/Cs
3907-520	22mL	5		20

### Extra Volume 2.5mL 96 Square Well Plate System

These square hole plates hold a full 2.5mL\*\* (2.2 with mat in place) and work as storage plates or reservoirs. A black snap in corner marker ensures proper orientation. Openings in the plate sides permit easy removal of mats or film. A clear lift off lid is available for transport or freezer storage. The clear lid fits even with a mat in place. Lid and plate of polypropylene. Autoclavable. Freezable -80°C.



#### 96 Square Well Polypropylene Plate System

Item	Description	Qty/Pk	Sterile	Qty/Cs
3900-520	Reservoir	10		10
3902-520	Reservoir with lid	10		10



- SBS\* Format
- Lab tested low evaporation

### Sample Library Tubes

These 1.2mL sample library tubes are supplied in a 96 tube format for storage of specimens. Each rack is printed with an alpha numeric grid that allows you to easily find a sample. The rack is designed to meet SBS\* standards and can be used in robotic applications. A clear snug-fit lid is included. In individual tube, 8 strip, and 12 strip formats. Racks, tubes and lid are autoclavable and freezable (-80°C). Made of polypropylene. Separate polyethylene closure strips are available for tubes. Available sterile and non sterile.

Item	Description	Qty/Pk	Sterile	Qty/Cs
3910-540	96 Individual Tubes, Racked	10		100
3910-545	96 Individual Tubes, Racked, Sterile	10	✓	100
3911-540	96 8-Strip Tubes, Racked	10		100
3911-545	96 8-Strip Tubes, Racked, Sterile	10	✓	100
3912-540	96 12-Strip Tubes, Racked	10		100
3912-545	96 12-Strip Tubes, Racked, Sterile	10	✓	100
3913-850	8-Strip Tube Closures	125		1,250
3913-855	8-Strip Tube Closures, Sterile	125	✓	1,250
3914-840	12-Strip Tube Closure	80		800
3914-845	12-Strip Tube Closure, Sterile	80	✓	800
3915-800	Individual Tubes, Loose	1000		10,000
3916-850	8-Strip Tubes, Loose	125		1,250
3917-850	12-Strip Tubes, Loose	80		800



\* Society for Biomolecular Screening  
\*\* 2.2 ml with silicone mat in place

# CULTURE TUBES

SuperClear™

These precision-molded, conical and round bottom tubes are perfect for a multitude of general laboratory uses. Precision crafted of extra clear virgin polypropylene in natural and colors or clear virgin polystyrene. Tube caps are made of low density polyethylene for a secure seal and are available in a fluted plug style or dual position design that permits sample aspiration.

Polypropylene tubes are autoclavable to 122°C and freezable to -90°C. Polystyrene tubes are not autoclavable but have a nominal temperature range between 90°C and -40°C. Polyethylene caps are not autoclavable, but are available pre-sterilized with many of the tube packages.

Polypropylene tubes can be centrifuged to 3000 RCF and polystyrene tubes will withstand 1500 RCF. (RCF; Relative Centrifugal Force, is not equivalent to RPM).



**Non-Pyrogenic**

Item	Description	Qty/Pk	Sterile	Qty/Cs
------	-------------	--------	---------	--------

**12x75mm Conical Tubes, 4 ml Capacity, without Caps**

3360-800	Polystyrene, Clear, 1000/Bag	1000		1000
3361-800	Polypropylene, Natural, 1000/Bag	1000		1000
3385-335	Polystyrene, Clear, 25/Bag	25	✓	500
3386-335	Polypropylene, Natural, 25/Bag	25	✓	500

**12x75mm Round Bottom Tubes, 5 ml Capacity, without Caps**

3325-350	Polystyrene, Clear, 125/Bag	125		1000
3325-355	Polystyrene, Natural, 125/Bag	125	✓	1000
3326-350	Polypropylene, Clear, 125/Bag	125		1000
3326-355	Polypropylene, Natural, 125/Bag	125	✓	1000
3305-800	Polystyrene, Clear, 3000/Bag	3000		3000
3306-800	Polypropylene, Natural, 3000/Bag	3000		3000
3310-800	Polystyrene, Clear, 1000/Bag	1000		1000
3311-800	Polypropylene, Natural, 1000/Bag	1000		1000
3311-802	Polypropylene, Yellow, 1000/Bag	1000		1000
3311-803	Polypropylene, Orange, 1000/Bag	1000		1000
3311-804	Polypropylene, Red, 1000/Bag	1000		1000
3311-806	Polypropylene, Purple, 1000/Bag	1000		1000
3311-807	Polypropylene, Blue, 1000/Bag	1000		1000
3311-808	Polypropylene, Green, 1000/Bag	1000		1000

**12x75mm Round Bottom Tubes, 5 ml Capacity, with Separate Dual-Position Caps**

3315-800	Polystyrene, Clear, 1000/Bag	1000		1000
3316-800	Polypropylene, Natural, 1000/Bag	1000		1000

**12x75mm Round Bottom Tubes, 5 ml Capacity, attached Dual-Position Caps, Sterile**

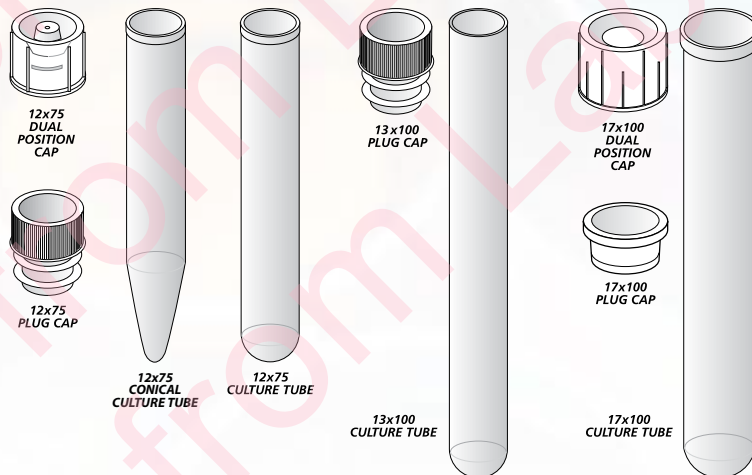
3328-355	Polystyrene, Clear, 125/Bag	125	✓	1000
3329-355	Polypropylene, Natural, 125/Bag	125	✓	1000
3335-335	Polystyrene, Clear, 25/Bag	25	✓	500
3336-335	Polypropylene, Natural, 25/Bag	25	✓	500

**12x75mm Round Bottom Tubes, 5 ml Capacity, attached Plug-Type Caps, Sterile**

3342-355	Polystyrene, Clear, 25/Bag	25	✓	500
3343-335	Polypropylene, Natural, 25/Bag	25		500

**Dual-Position Caps for 12x75mm Tubes**

3300-800	Polyethylene, Clear, 1000/Bag	1000		3000
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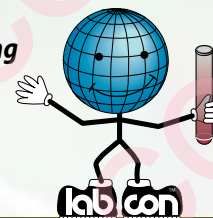


# CULTURE TUBES

12 x 75mm, 13 x 100mm, 17 x 100mm



- Ultra clear resin
- Colored tubes available
- Medical grade (U.S.P.) packaging
- Thicker walls will not crush



Polypropylene tubes available in colors.

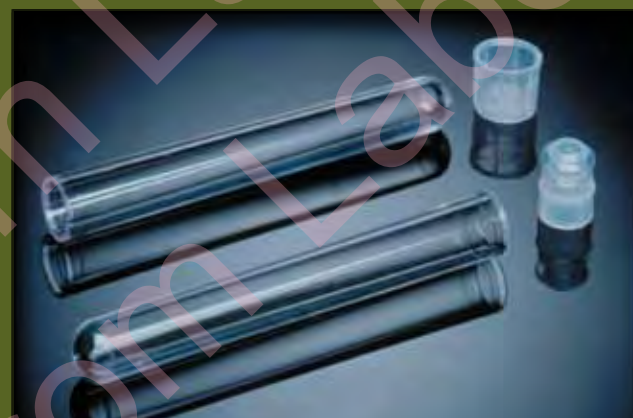


Labcon tubes heavy walls protect your sample



Other brands of culture tubes have thin walls that crush easily

Item	Description	Qty/Pk	Sterile	Qty/Cs
<b>13x100mm Tubes 8 ml Capacity, without Caps</b>				
3410-800	Polystyrene, Clear, 1000/Bag	1000		1000
3411-800	Polypropylene, Natural, 1000/Bag	1000		1000
3425-350	Polystyrene, Clear, 125/Bag	125		1000
3426-350	Polypropylene, Natural, 125/Bag	125		1000
3425-355	Polystyrene, Clear, 125/Bag	125	✓	1000
3426-355	Polypropylene, Natural, 125/Bag	125	✓	1000
<b>17x100mm Tubes, 14 ml Capacity, without Caps</b>				
3510-800	Polystyrene, Clear, 1000/Bag	1000		1000
3511-800	Polypropylene, Natural, 1000/Bag	1000		1000
3525-355	Polystyrene, Clear, 125/Bag, Natural	125	✓	1000
3526-355	Polypropylene, Natural, 25/Bag	125	✓	1000
<b>17x100mm Tubes, 14 ml Capacity, with Polyethylene Dual-Position Caps</b>				
3515-800	Polystyrene, Clear, 1000/Bag	1000		1000
3516-800	Polypropylene, Natural, 1000/Bag	1000		1000
3528-355	Polystyrene, Clear, 125/Bag	125	✓	1000
3529-355	Polypropylene, Natural, 125/Bag	125	✓	1000
3535-335	Polypropylene, Clear, 125/Bag	25	✓	500
3536-335	Polystyrene, Clear, 25/Bag	25	✓	500
<b>Plug-Type Caps for 13x100mm and 12x75mm Tubes, Polyethylene</b>				
3302-800	Natural, 1000/Bag	1000		3000
3302-801	White, 1000/Bag	1000		3000
3302-802	Yellow, 1000/Bag	1000		3000
3302-803	Orange, 100/Bag	1000		3000
3302-804	Red, 1000/Bag	1000		3000
3302-806	Blue, 1000/Bag	1000		3000
3302-807	Purple, 1000/Bag	1000		3000
3302-808	Green, 1000/Bag	1000		3000
3302-870	Assorted, 500/Bag	500		3000
<b>Dual-Position Caps for 17x100mm tubes</b>				
3500-800	Polyethylene, Natural, 1000/Bag	1000		1000
<b>Plug-Type Caps for 17x100mm Tubes</b>				
3055-870	Polyethylene, Natural, 500/Bag	500		1000



13x100 mm Round Bottom tubes with dual position and plug-type caps.



17x100 mm Round Bottom tubes with dual position caps.



### UrineTime™ II 24 Hour Collection System

- **New Two Liter Bottles**
- **Keyed Bottles More Stable**
- **New Package Options**
- **Enables Faster Diagnosis**

Item	Package	Unit	Qty/Cs
4010-110-010	1 Assembled Unit	1	1
4010-420-010	4 Assembled Units	1	4
4010-920-010	5 Sets Ready to Assemble	1	10



UrineTime™ II kits come complete with everything you need to collect safely two separate samples over 24 hours.

UrineTime II™ from Labcon improves on an already great product. The new 2 liter keyed bottles are much more stable than earlier models and with their keyed sides they now stay firmly oriented and locked together.

#### UrineTime II Solves an Old Problem

A problem occurs when more than one assay is needed for a single 24 hour urine sample and the assays require different preparations or preservatives. Unlike the usual method of collecting samples over two days the UrineTime™ II reduces the time it takes to collect samples and speeds the diagnosis and treatment process.

#### UrineTime II is Convenient

Understanding and using UrineTime II is convenient for patients. And since their treatment can begin a full day earlier better care is assured.

#### Cost

UrineTime II is provided with everything needed to collect two 24 hour samples. Staff time is reduced since labels, packaging and transport accessories are provided in a neat package. And UrineTime™ II is perfect for outpatient use so there is no need to ensure compliance through admission.

Available in a single use kit, 4 kits in a box, or economical ready to assemble bulk packaging.



- Fits standard 13 x 100 and 16 x 100 collection tubes
- With integral filters for prep work

### Tip Top™ Dispenser Caps

*A safe and cost effective way of dispensing samples in your lab.*

The Tip Top is a disposable cone shaped cap that fits all standard 13 or 16mm blood collection tubes. A small opening allows you to dispense a sample without removing the Tip Top cap so you can prepare smears on slides or dispense into reagent wells or microcentrifuge tubes safely.

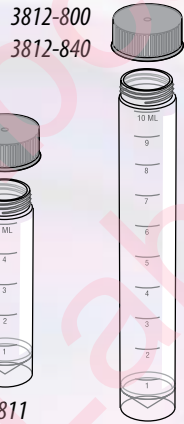
- Convenient - just tilt the tube and squeeze to dispense one drop
- Safe - you don't need to open the tube and pipet out of the tube so spillage is reduced along with potential exposure to infectious disease
- Low Evaporation - A flexible cap is available to cover the Tip Top so you can store samples in the refrigerator.

The Tip Top cap can be used with almost any liquid. Made from chemically resistant polyethylene they can dispense serum, reagents, plasma, whole blood and CSF. The integral porous polyethylene filter efficiently separates serum and can also be used as a reagent blender.



Item	Description	Qty/Pk	Qty/Cs
5511-800	Natural, Fits 13mm tubes, 1000/bag	1000	5000
5512-800	Natural, Fits 16mm tubes, 1000/bag	1000	5000
<b>Closures for Sealing Tip Top Caps</b>			
5515-804	Closure, Red, 1000/bag	1000	5000

# SPECIMEN COLLECTION



IATA 95kPA Certified

## 5 ml and 10 ml Sample Tubes

Leakproof freestanding mailing tubes with screw caps feature graduations at 1 ml increments and a large frosted writing surface for convenient labeling and identification. Each tube is molded from durable polypropylene, has a conical bottom, and a wide skirted base. Polyethylene screw caps are included. Tubes are autoclavable (122°C) and lab tested and certified to the IATA 95kPA standard for safe shipping of samples.

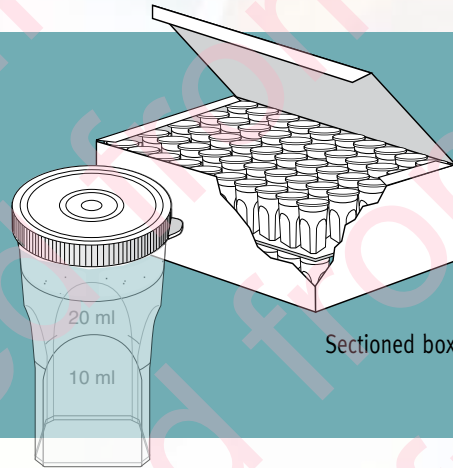


## 30 ml Sample Tubes

These freestanding sample and centrifuge tubes include permanent molded graduations and easy to label white caps. Made of polypropylene. Tubes and caps are autoclavable (122°C). Sterile tubes are radiation sterilized by validated (ISO) process.

## Sample Vials For Cell Counters or Dilutions

Vials are particle free with an attached leak proof polyethylene cap. Vials are made from virgin polystyrene and can be used in a blood cell counter. Manufactured in a clean environment.



Sectioned box



### 1. 5mL and 10mL Sample Tubes with screw cap

Polypropylene

Item	Package	Qty/Pk	Sterile	Qty/Cs
3811-800	5mL tube, 500/bag	500		1000
3812-800	10mL tube, 500/bag	500		1000
3812-840	10mL tube, 50/bag	50		1000

### 2. 30mL Sample Tubes with screw cap

Polypropylene

Item	Package	Qty/Pk	Sterile	Qty/Cs
3096-340	50/bag, 10 bags/Case	500		1000
3096-345	50/bag, 10 bags/Case	500	✓	1000
3096-870	Bulk	500		500

### 3. Sample Vials

Polystyrene

Item	Package	Qty/Pk	Sterile	Qty/Cs
2030-550	144/Sectioned box, 5 Box/Cs.	144		720
2025-800	Bulk	1000		1000

### 4. 15mL Urine Centrifuge Tubes

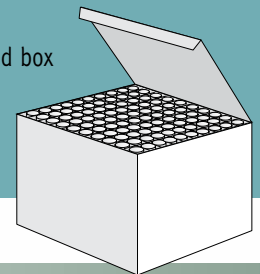
Item	Package	Qty/Pk	Sterile	Qty/Cs
3060-540	Polystyrene, 100/box	100		1000
3061-540	Polypropylene, 100/box	100		1000
3050-870	Polystyrene, Bulk	500		1000
3051-870	Polypropylene, Bulk	500		1000
3055-870-010	Plug-style caps, Polyethylene	500		1000

### 4.

## Urine Centrifuge Tubes

Disposable 15mL polystyrene Urine Centrifuge Tubes have visible graduations and fit standard centrifuge heads. Caps are made from low density polyethylene.

Sectioned box



# ORGANIZATIONAL TOOLS

## Storage Racks



### 1. 64-Place Reversible Rack for Micro Tubes

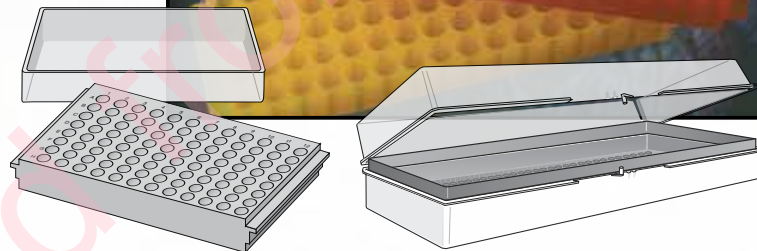
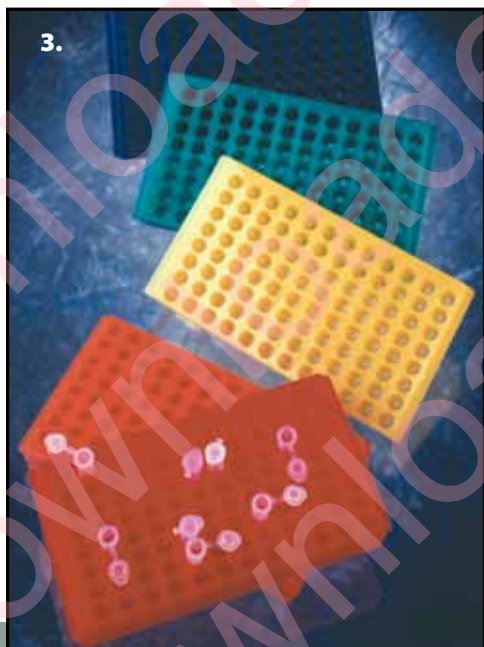
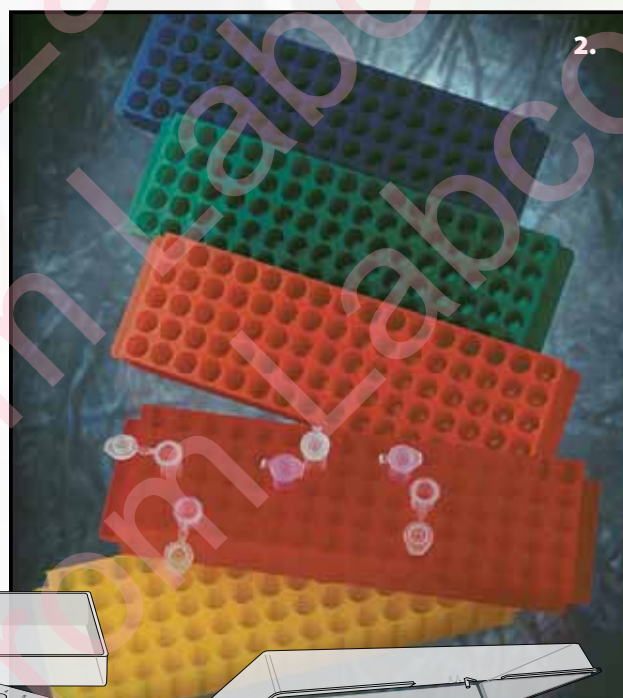
A smaller version of the 96-place rack, this 64-place rack fits into popular freezer racks. Use instead of cardboard 5¼" square racks. These racks hold 0.5mL micro tubes on one side and 1.5mL or 2.0mL tubes on the other side. Clear lid is included. Autoclavable and freezable. Made of polypropylene. Assorted color package includes red, orange, yellow, green, blue.

Item	Package	Qty/Pk	Qty/Cs
2550-220	Natural, with lid	5	5
2550-229	Assorted Colors, with lid	5	5

### 2. 80-Place Racks and Storage Boxes

For use with 1.5mL and 2.0mL micro centrifuge tubes and 2.0mL cryo-vials. Racks are used for bench work and the Gilson® FC-80 fraction collector. Rack and storage box are fully autoclavable (122°C) and freezable (-80°C). Made of polypropylene.

Item	Package	Qty/Pk	Qty/Cs
2600-220	Natural	5	5
2600-224	Red	5	5
2600-223	Orange	5	5
2600-222	Yellow	5	5
2600-228	Green	5	5
2600-227	Blue	5	5
2600-226	Purple	5	5
2600-221	Black	5	5
2601-220	Hinged Storage Box	5	50



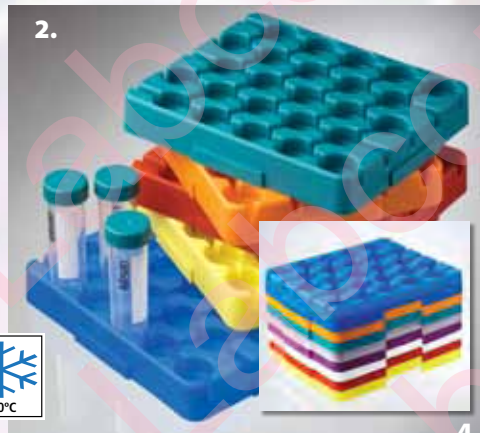
### 3. 96-Place Racks and Storage Boxes

For use with 0.5mL, 1.7mL and 2.0mL micro centrifuge tubes and 2.0mL cryo-vials. These double-sided racks hold 1.7 and 2.0mL tubes on one side and 0.5mL on the reverse side. Rack and clear lid are fully autoclavable (122°C) and freezable (-80°C). Made of polypropylene.

Item	Package	Qty/Pk	Qty/Cs
2500-220	Natural	5	5
2500-224	Red	5	5
2500-223	Orange	5	5
2500-222	Yellow	5	5
2500-228	Green	5	5
2500-227	Blue	5	5
2500-226	Purple	5	5
2500-221	Black	5	5
2501-220	Assorted	5	5
2501-220	Cover, clear	5	5

# ORGANIZATIONAL TOOLS

## Storage Racks



### 1. 16-Place or 36-Place Freezer Storage Boxes for 50mL and 15mL Centrifuge Tubes

Designed to hold 50mL or 15mL tubes these boxes are perfect for long term storage of frozen samples. They include a white upper body that can be easily labeled with a lab marker, a numerical reference grid, and a pull tab to make removal from storage racks easier. A clear cover is included. Made of autoclavable (122°C) polypropylene.

Item	Package	Qty/Pk	Qty/Cs
2704-220	Rack, 50mL with Lid	2	2
2703-220	Rack, 15mL with Lid	2	2



### 2. Reusable Racks for 50mL and 15mL Centrifuge Tubes

These racks are designed to hold Labcon centrifuge tubes and replace the foam racks you use. Unlike foam racks they are autoclavable and will not fall apart with repeated use. They can be frozen, and they stack together to minimize storage space. Also, they have an interlocking design so you can connect more than one rack and create a handy work station. Autoclavable (122°C) and Freezable (-80°C). These racks are designed for Labcon centrifuge tubes, other tube brands may not fit.

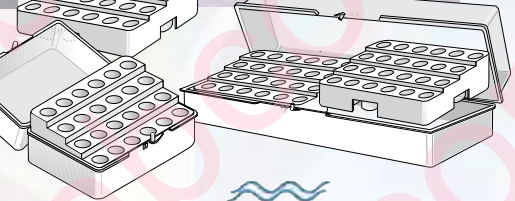
for 15 ml tubes				for 50 ml tubes			
Item	Package	Qty/Pk	Qty/Cs	Item	Package	Qty/Pk	Qty/Cs
2715-220	Natural	5	5	2750-220	Natural	5	5
2715-221	White	5	5	2750-221	White	5	5
2715-222	Yellow	5	5	2750-222	Yellow	5	5
2715-223	Orange	5	5	2750-223	Orange	5	5
2715-224	Red	5	5	2750-224	Red	5	5
2715-226	Purple	5	5	2750-226	Purple	5	5
2715-227	Blue	5	5	2750-227	Blue	5	5
2715-228	Green	5	5	2750-228	Green	5	5
2715-229	Assorted	5	5	2750-229	Assorted	5	5



### 3. 24- & 48-Place Floating Racks

24-Place and 48-Place micro centrifuge tube and cryo-vial storage system. For 1.5 ml and 2.0 ml tubes. These racks fit into Labcon pipet tip boxes and are made of recycled plastic. Fully autoclavable (122°C) and freezable (-80°C). Stackable racks float in your water bath and can incorporate dry ice for use with frozen samples on the bench.

Item	Package	Qty/Pk	Qty/Cs
3035-500	24-Place Rack, in hinged box	10	100
3036-220	24-Place Rack, without box	10	100
3035-230	48-Place Rack, in hinged box	5	50
1215-120	Hinged box, without rack	5	50



### 4. PCR\* Workstation and Prep Rack

The PCR\* Workstation is perfect for preparing samples for cycling or working with completed procedures. These racks have a separate removable 96-well rack that holds a plate or any combination of strips or tubes. Separate working wells surround the 96-well plate and accommodate 0.5, 1.5 or 2.0mL tubes. Clear lid is included. Available in assortment pack of five colors: red, orange, yellow, green and blue. Autoclavable and freezable. Made of polypropylene. 96-well rack separates from PCR\* workstation.

Item	Package	Qty/Pk	Qty/Cs
2720-229	PCR* Workstation, Assorted	5	5

\*PCR\* is a patented process of Hoffman-LaRoche. Use of the PCR\* process requires a license.



### PCR Storage Racks

The PCR Storage rack is perfect for storing your samples before cycling or working with completed procedures. These racks will hold tubes, strips, or plates and have a separate snap on lid. In an assortment pack of five colors: red, orange, yellow, green and blue. Autoclavable and freezable. Made of polypropylene.

Item	Package	Qty/Pk	Qty/Cs
2721-229	PCR Storage Rack	5	20



### Benchtop Color Change PCR Chiller

Like the Benchtop chiller but designed to work with your standard PCR tubes, strips, and plates. These chillers change color from solid purple to pink as the cooling surface warms. This gives you a visual indication when your samples need to be returned to the freezer. These chillers will hold 0°C temperature for up to 4 hours on the bench. Holds all major brands of PCR disposables. Includes clear lid. Made of polypropylene and thermal gel.

Item	Package	Qty/Pk	Qty/Cs
2735-220	PCR Storage Rack	2	10

### Expandable Bench Racks

This expandable 4 part rack system holds, 50ml and 15mL centrifuge tubes, micro centrifuge tubes, PCR tubes and plates, and culture tubes. You can assemble it into the configuration that works for your lab. Autoclavable and Freezable (-80C). Includes Purple, Yellow, Blue and Green sections.

Item	Package	Qty/Pk	Qty/Cs
2706-220	Bench Rack	1	1



### Cryo Storage Boxes

These durable polycarbonate storage boxes hold most major brands of cryo tubes and micro centrifuge tubes. They include a special color coded labeled inner grid that lets you easily locate your stored sample even if frost covers the lid. The clear body and lid allow you to periodically assess the contents without having to remove the lid and samples. And you won't have to fumble with orienting the lids since they fit in any direction. Available in 25 place, 81 place, and 81 place tall for 5ml cryo tubes. Autoclavable.

Item	Package	Qty/Pk	Qty/Cs
2710-220	25 Place	5	20
2711-220	81 Place	5	20
2712-220	81 Place Tall	5	20



### Benchtop Chillers

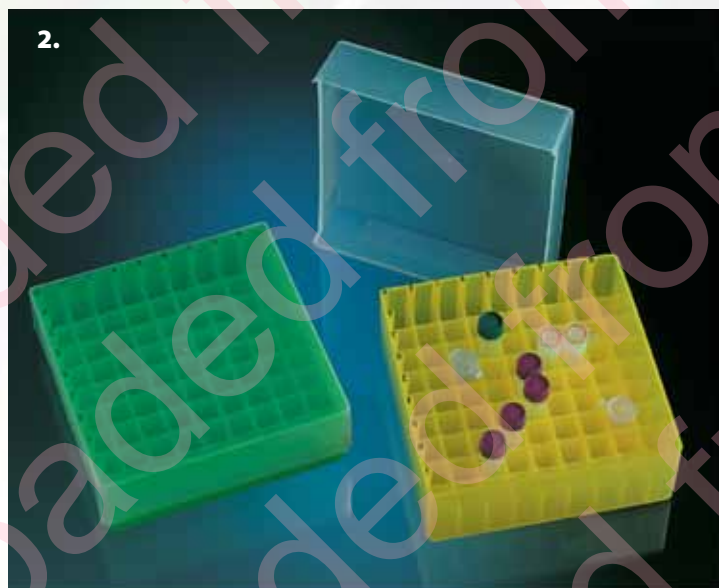
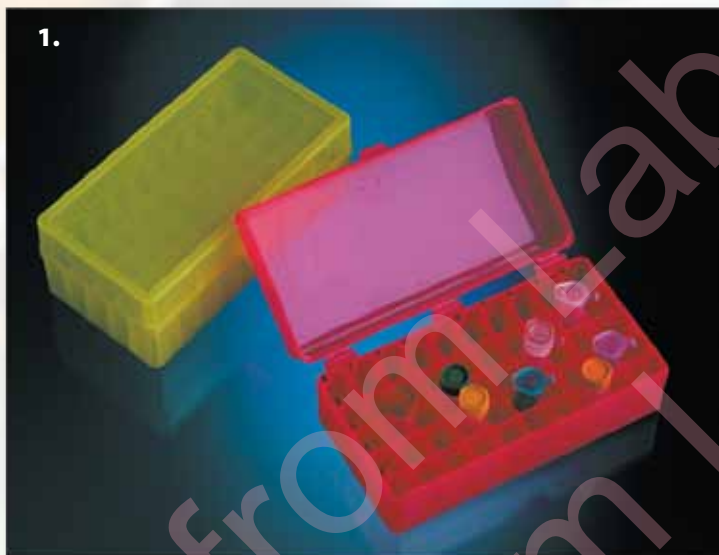
The Benchtop chiller works with 0.5, 0.65, 1.5, 1.7, and 2.0mL micro tubes. Freeze these chillers overnight and remove them from the freezer. After about a hour they will be at the defined chilling temperature appropriate for your bench work and they will hold that temperature for up to 4 hours. Available in 0 degrees and -20 degrees versions. Holds 20 tubes. Made of polycarbonate and thermal gel.

Item	Package	Qty/Pk	Qty/Cs
2731-220	0 degrees	1	1
2730-220	-20 degrees	1	1



# ORGANIZATIONAL TOOLS

## Multi-Place Boxes



### 1. 50- or 100-Place Freezer Box with Attached Hinged Lids

These freezer boxes are designed to hold 1.5mL and 2.0mL tubes and some 1.2mL cryo vials. Convenient hinged lid and snap lock closure make these boxes very versatile in any lab. Alpha numeric labeled grid makes identifying contents simple. Indented lids can be labeled. Autoclavable. Assorted color package: red, orange, yellow, green, blue. Made of polypropylene.

Item	Package	Qty/Pk	Qty/Cs
2708-220	50 Place, Natural	5	5
2708-229	50 Place, Assorted Colors	5	5
2709-220	100 Place, Natural	5	5
2709-229	100 Place, Assorted Colors	5	5



### 2. 81-Place Freezer Box with Separate Lid

This high capacity freezer box is designed to fit into existing freezer storage racks. Holds 81 x 1.5mL or 2.0mL micro centrifuge tubes. Labeled alpha numerically for easy identification of contents. 5 1/4" L x 5 1/4" W size replaces cardboard racks. Clear lid included. Autoclavable. Assorted color package includes red, orange, yellow, green, blue. Made of polypropylene.

Item	Package	Qty/Pk	Qty/Cs
2707-220	81 Place, Natural	5	5
2707-229	81 Place, Assorted Colors	5	5



### 3. 100-Place Freezer Storage Box with Separate Lid

The 100-Place storage box is for use with Labcon and major brands of screw cap micro centrifuge tubes. This box is designed to hold 100 tubes upright and separate to provide adequate spacing for sub zero storage. Drain holes are provided in box for usage to -190°C. 5 1/4" L x 5 1/4" W x 2 1/16" H size fits all standard storage units. Clear lid gives you a good view of samples and does not require special alignment to close. Posts next to tubes are numbered letting you locate the sample you need quickly. Stackable and autoclavable. Made of polycarbonate.

Item	Package	Qty/Pk	Qty/Cs
2713-220	100 Place Cryo Storage Box	5	20



# QUALITY AND COMPLIANCE



We make independently verified quality. All the Labcon products in this catalog are supplied by an ISO 9001:2008 registered manufacturing facility. Every aspect of these products are quality proven from design to delivery before independent auditors every six months.



The manufacturing facility is registered by the U.S. Food and Drug Administration to manufacture medical devices.



U.S. Pharmacopeia Methods and Guidelines (U.S.P. Class VI) are used if there is an applicable standard.

We use more expensive medical grade resins instead of the more common commodity grade used in most pipet tips. We then pre-test to check for contaminating clarifying agents or molding additives before we approve them for use in the products we supply you.



The plastic resins we use are compliant with FDA CFR Title 21-177.1520, 178.3295, 178.3297 and ISO 10993-3 to ensure that they are non cytotoxic and are not harmful to cells or tissue samples.



The resins used for these products have been tested for the presence of trace heavy metals and have been found to contain less than a detectable level of 1 part per million. Products shown in this catalog as Metal Free have been tested and are certified to contain less than 1PPB of common extractable metals. A separate certificate is available for these items.



Spin rates for tubes are expressed as RCF (Relative Centrifugal Force). RCF is calculated for any rotor by using the formula:  $RCF = (11.17 \times 10^{-7}) RN^2$  where R=Radius in mm from centrifuge spindle to bottom of tube and N=Speed of spindle in RPM. Always run a trial to establish the RCF for the tube you intend to use.



Items listed as autoclavable can be autoclaved at 122 °C for a maximum of 20 minutes at 15 P.S.I. Remember to back-off the caps of tubes to prevent collapse when autoclaving. A steam cycle should be used with the items in this catalog that are listed as autoclavable. Always air dry these items. Avoid using a dry cycle or glassware cycle as deformation can occur to plastics that are heated for extended periods.



When freezing samples in tubes remember to provide adequate spacing to allow for even cooling rates. Crowding or inadequate spacing or use of foam or other types of insulated racks that cause uneven cooling, can cause cracking or crazing. Maximum nominal freezing temperatures are shown for specific products.



Pipet tip racks are completely molded of recycled plastics. Racks are also coded for local recycling. A recycling program is available to pre-authorized participants. Please contact us for more information on how to join.



Items shown with the CE marking are compliant with CE directive 98/79 EEC for In-vitro Diagnostics.



Because the presence of nucleases; both RNase and DNase is of great concern we test every production lot of pipet tips, centrifuge tubes, and microtubes where noted inside. Our testing frequency is so great you can be sure these Labcon products are safe and pure.

Every lot of the Low Binding pipet tips in this catalog is tested to guarantee that they are free of protease contamination. This assures that these products can reliably be used in protein and proteomic research.

All of our PCR\* products and Aerosol Filter Tips in this catalog are tested for DNA. Every lot of product is tested to a detection level of 1 pg of Human Genomic DNA.



Following the latest U.S.P. methods we check every lot of sterile products for endotoxins before sterilization. This ensures that our extremely clean process is systematically maintained.





# CHEMICAL RESISTANCE CHART

Hi Density Polyethylene and Low Density Polyethylene have the same chemical resistance properties. Chemical resistance is shown on a sliding scale of ▲ to ◆.

high resistance ▲ ● ■ ◆ no resistance

Note: Resistance was tested at: 20°C; 60°C; 100°C., so each listing below may have more than one symbol applied.

## TYPE OF PLASTIC

Hi Density Polyethylene (PE)  
 Low Density Polyethylene (PE)  
 Polypropylene (PP)  
 Polystyrene (PS)  
 Polycarbonate (PC)

## TEMP. RANGE °C\*

-40 +140  
 -40 +100  
 -90 +140  
 -40 +90  
 -190 +140

\* Using water. Organic solvents or physical procedures like centrifuging may reduce usable temperature range

	%CONC	PE	PP	PS
Acetic Acid (glacial)	97	◆	◆	◆
Acetic Acid	50	●	●	●
Acetone	100	◆	◆	◆
Acetophenone	100	●	●	◆
Aluminum chloride		▲	▲	▲
Ammonia (aqueous)		▲	▲	▲
Ammonium carbonate	satd.	▲	▲	▲
Ammonium sulphate	satd.	▲	▲	▲
Amyl acetate	100	◆	◆	◆
Amyl alcohol	100	▲	▲	▲
Aniline	100	■	●	◆
Aqua regia		◆	◆	◆
Barium carbonate	100	▲	▲	▲
Barium chloride	satd.	▲	▲	▲
Benzaldehyde		▲	▲	▲
Benzene		◆	◆	◆
Benzoic acid	100	◆	◆	◆
Benzyl acetate	satd.	●	●	◆
Benzyl alcohol		▲	▲	▲
Borax	satd.	▲	▲	▲
Boric acid		▲	▲	▲
Bromine liquid	satd.	◆	◆	◆
Butyl acetate		■	■	◆
Butyl alcohol	100	▲	▲	▲
Butyric acid		●	◆	◆
Calcium chloride	satd.	▲	▲	▲
Calcium hypochlorite bleach		▲	▲	▲
Carbon dioxide (wet)		▲	▲	▲
Carbon disulphide		◆	◆	◆
Castor oil		▲	▲	▲
Cetyl alcohol		▲	▲	▲
Chlorine	100	◆	◆	◆
Chlorobenzene		◆	◆	◆
Chloroform	100	◆	◆	◆
Chlorosulfonic acid	100	◆	◆	◆
Chromic acid	50	●	●	●
Cider		▲	▲	▲
Citric acid		▲	▲	▲
Copper sulfate	satd.	▲	▲	▲
Cottonseed oil	satd.	▲	▲	▲
Cyclohexane	satd.	▲	▲	▲
Cyclohexanol		▲	▲	▲
Cyclohexanone	100	◆	◆	◆
Decalin		■	■	◆
Detergents		▲	▲	▲
Diacetone alcohol		▲	▲	▲
Dibutyl phthalate		■	■	◆
Dichlorobenzene		●	●	◆
Diethylene glycol		▲	▲	▲
Ethanol	95	▲	▲	▲
Ethyl acetate		■	■	◆
Ethyl benzene	40	■	●	◆
Ethyl chloride		◆	◆	◆
Ethylene glycol	100	▲	▲	▲
Formaldehyde		▲	▲	▲
Formic acid	100	▲	▲	▲
Fuel oil		■	■	◆
Furfural		◆	◆	◆
Gasoline		◆	◆	◆
Glycerine		▲	▲	▲
Heptane		◆	◆	◆
Hydrochloric acid	50	▲	▲	▲
Hydrofluoric acid	40	▲	▲	▲
Hydrogen peroxide		▲	▲	▲
Hydrogen sulfide		▲	▲	▲
Hydroquinone		▲	▲	▲
Iodine tincture		●	●	●
Kerosene		●	●	◆
Lactic acid		▲	▲	▲
Lanolin		▲	▲	▲
Lead acetate	100	▲	▲	▲
Linseed oil	satd.	▲	▲	▲
Magnesium carbonate		▲	▲	▲
Magnesium chloride	satd.	▲	▲	▲
Magnesium sulfate	satd.	▲	▲	▲
Mercuric chloride		▲	▲	▲

	%CONC	PE	PP	PS
Mercury		▲	▲	▲
Methanol		▲	▲	▲
Methyl acetate		▲	▲	▲
Methylene chloride	100	◆	◆	◆
Methyl ethyl ketone	100	◆	◆	◆
Methyl isobutyl ketone	100	▲	▲	▲
Methyl propyl ketone		●	●	◆
Mineral spirits	100	▲	▲	▲
Naphthalene	100	▲	▲	▲
Nickel sulfate	satd.	▲	▲	▲
Nitric acid	satd.	▲	▲	▲
Nitric acid fuming		◆	◆	◆
Nitrobenzene		◆	◆	◆
Octane		▲	▲	▲
Oleic acid		▲	▲	▲
Olive oil		▲	▲	▲
Oxalic acid (aqueous)		▲	▲	▲
Ozone	50	◆	◆	◆
Petroleum ether	100	◆	◆	◆
Phenol (liquid)		■	■	◆
Phosphoric acid	100	▲	▲	▲
Potassium bichromate		▲	▲	▲
Potassium bromate	satd.	▲	▲	▲
Potassium bromide		▲	▲	▲
Potassium carbonate	1	▲	▲	▲
Potassium chloride	satd.	▲	▲	▲
Potassium chromate	satd.	▲	▲	▲
Potassium dichromate	satd.	▲	▲	▲
Potassium fluoride	satd.	▲	▲	▲
Potassium hydroxide		▲	▲	▲
Potassium nitrate		▲	▲	▲
Potassium permanganate	satd.	▲	▲	▲
Potassium sulfate	satd.	▲	▲	▲
Potassium sulfide	10	▲	▲	▲
Propane		■	■	◆
Propanol		▲	▲	▲
Propylene glycol		▲	▲	▲
Propylene oxide		◆	◆	◆
Pyridine		■	■	◆
Salicylic acid		▲	▲	▲
Silicone oil		▲	▲	▲
Silver nitrate		▲	▲	▲
Sodium acetate	100	▲	▲	▲
Sodium borate	satd.	▲	▲	▲
Sodium bromide oil solution	satd.	▲	▲	▲
Sodium carbonate	satd.	▲	▲	▲
Sodium chloride		▲	▲	▲
Sodium fluoride	satd.	▲	▲	▲
Sodium hydroxide	satd.	▲	▲	▲
Sodium hypochlorite	satd.	▲	▲	▲
Sodium nitrate	15	▲	▲	▲
Sodium sulfate		▲	▲	▲
Sodium sulfide		▲	▲	▲
Sodium sulfite		▲	▲	▲
Stearic acid, (crystals)	satd.	▲	▲	▲
Sulfur	satd.	▲	▲	▲
Sulfuric acid	satd.	▲	▲	▲
Sulfuric acid	98	■	■	◆
Tannic acid	10	▲	▲	▲
Tartaric acid		▲	▲	▲
Tetrahydrofuran		■	■	◆
Tetralin		■	■	◆
Thionil chloride		●	●	◆
Toluene	100	◆	◆	◆
Transformer oil	100	■	■	◆
Trichloroethylene		◆	◆	◆
Triethanolamine	100	▲	▲	▲
Triethylene glycol		▲	▲	▲
Turpentine		●	●	◆
Undecanol	100	▲	▲	▲
Urea		▲	▲	▲
Vinegar		▲	▲	▲
Water (all forms)		▲	▲	▲
Whiskey		▲	▲	▲
Xylene	100	◆	◆	◆
Zinc chloride		▲	▲	▲
Zinc sulfate		▲	▲	▲

