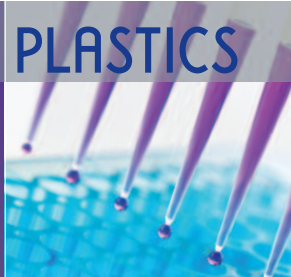




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Our global network for your success

Golden Gate

013/014

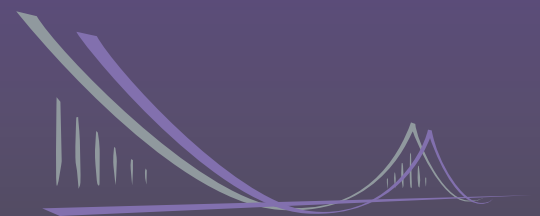


PCR PLASTICS

microtube systems

pipetting solutions

RACKS



GOLDENGATE  
BIOSCIENCE

*better by design*

GoldenGate Bioscience's products have been used at the leading-edge of scientific research applications for the past 30 years. During that time, many of the company's innovations have greatly simplified procedures and enhanced productivity in life-science laboratories around the world.

Since its incorporation in 1984, GoldenGate Bioscience's parent company has been developing and manufacturing precision, injection-molded, consumable lab products for the global bio-tech research community.

Over the years, the company has developed many product innovations that were the first in this industry, and are now considered to be industry standards. In support of its philosophy of manufacturing lab products that are "Better by Design", GoldenGate Bioscience distinguishes itself by incorporating practices and procedures guaranteed to deliver only the highest quality products on a consistent basis. Always creative, the company follows a continuous improvement policy which ensures that it will meet the demanding standards, as well as the ever-changing needs, of life-science professionals.

GoldenGate Bioscience is compliant with manufacturing, packaging, and operational quality standards as outlined in ISO9001:2008. With certification imminent, the company's record-keeping practices ensure full traceability of all materials and personnel employed in the making of every product it manufactures. Certificates of Conformity, on a lot-by-lot basis, are available on request.



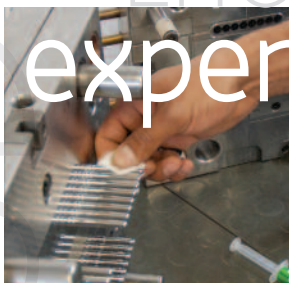


service



Quality may be assured using a number of criteria. Of course, the final product must meet the function and standards requirements for which it was designed. This is achieved by implementing the most stringent mold-building, manufacturing, and packaging procedures. Company philosophy dictates that quality is best defined through the delivery of these products on a timely and affordable basis, to customers around the world, and that these standards must be met on a consistent basis.

As one of the few remaining companies in this industry still manufacturing its products in California, GoldenGate Bioscience uses only USP Class 6, FDA-approved medical-grade, bovine-free plastic resins, running in the highest quality stainless-steel molds, in medically-clean facilities. By doing so, the company remains in complete control of its manufacturing procedures and its product quality. Since the beginning, all molds have been diamond-polished to a glass-like finish, resulting in precision-made consumable products, and ensuring their optimum performance as demanded by the life-science research community.



expertise

ENGINEERING



GoldenGate Bioscience UniFit™ Tips, with the optional, innovative **Low Fluid Retention (LFR™) resin technology**, provide superior sample recovery while increasing accuracy and reproducibility for pipetting liquid in microvolumes. UniFit™, universal-fitting pipette tips, in regular and filter barrier formats are designed to fit practically all single and multichannel pipettes (see pages 12-15 for Compatibility Table).

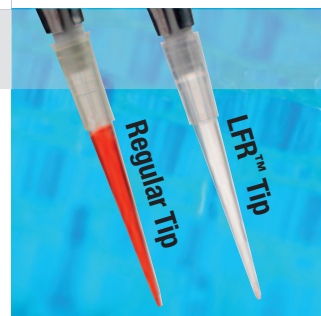
AeroGard™ filter barriers block aerosols by coalescing radioactive, chemical, or biological contaminants before they can come in contact with pipettor shafts. This effectively eliminates unwanted signals induced by residual RNA/DNA transferred in trace amounts by aerosol cross-contamination. They also act as a safety barrier against accidental over-pipetting of fluids without risk of sample lock-up.

GoldenGate tips are available in a number of packaging formats:

- ▶ **Bulk** bags - these nylon bags are self-standing and include resealable Zip-Locks for convenience
- ▶ **Hinged** lid racks in regular SBS format
- ▶ **Reload** in space, budget and environment-saving stacks
- ▶ **MiniStack™** for applications requiring intensive tip use, and in particular those involving multichannel pipetting

All racks and lids are molded exclusively of internally-generated recycled polypropylene to ensure the utmost cleanliness and performance.

Standard yellow or blue-tinted UniFit Tips are available in metal-free, natural-colored polypropylene resin.



*better by design*



tips  
E  
T  
E  
P  
P



GoldenGate Bioscience LFR™ Low-Fluid-Retention Tips combine over 10 years of research and development in resin technology with its traditional diamond polished, ultra smooth mold surfaces, and together result in superior pipette tip performance.

# Low Fluid Retention Technology

offers unparalleled maximum fluid recovery to save precious samples and reagents

The real-life environment of a university molecular biology lab was selected for product comparison tests, with samples and reagents in every-day use in life science research applications. The food coloring additive in the tips shown adjacent visually demonstrates the superior low retention capabilities of GoldenGate tips over other manufacturers.

Most pipette manufacturers recommend pre-rinsing of tips 3-5 times to wet the inner wall prior to pipetting. In addition, many researchers in practice use the same tip not only once, but several times. The GoldenGate test method therefore took these facts into account and its tips' performance were evaluated after several aspirations and dispense cycles. This method clearly demonstrated significant and measurable differences between brands as the number of pipettings increased. GoldenGate Bioscience considers this to be more realistic in actual user practices. See page 34 for full test results.



# packaging

GoldenGate Bioscience offers some of the most flexible packaging options available from any manufacturer.

Whether it be racked or bulk packed, user-convenience and product integrity has been foremost in design consideration.



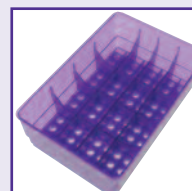
## bags



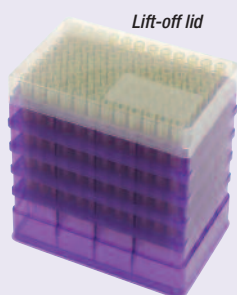
All GoldenGate **Bulk Packaging** for pipette tips and tubes utilizes thick, durable nylon base and puncture-resistant bags. Each DispenserBag incorporates a wide gusset to enable self-standing, and so allow single-handed access to the contents. Heat-sealed above the Zip-Lock closure, product integrity and cleanliness is assured right down to the last tip.

## racked

GoldenGate **Racked Pipette Tips** feature easy open-close hinged or removeable lift-off lids (1000µl only). The footprint is compatible with SBS Standard (except 1250µl racks), and due to the massive internal rib structure, they provide an extremely strong, non-flexing platform for manual or automated multichannel pipetting work. The tip deck features recessed wells to ensure perfect tip alignment whenever multichannel pipettes are used. All GoldenGate racks are autoclavable.



## mini stack



GoldenGate **MiniStacks** are ideal for applications requiring intensive tip use, and in particular those involving multichannel pipetting. Simply use the top tray and discard when empty to access the next level of 96 tips. One rack, 4 trays of 96 tips with lid per MiniStack allows up to 480 pipettings to be carried out without having to replenish tip stocks. This will be of significant benefit to those with restricted space or those working in hood environments where the risk of contamination will be minimized by reducing the movement of items in and out of the hood.

By reducing the number of plastic components, ReloadStacks and MiniStacks provide an environmentally friendly solution to packaging.

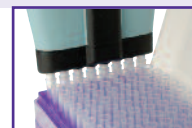
In addition to saving space on the bench, they offer a reduction in volume for shipping, storage, and of course minimize the effect of waste disposal on the environment. GoldenGate MiniStacks are autoclavable.

## reload stack system

- **Cost-effective**
- **Waste reducing** - because base and lid are continuously reused, only the tip tray is disposed of, saving up to 50% plastic when compared to other systems
- **Space saving** - for both the lab bench and also in shipping and storage

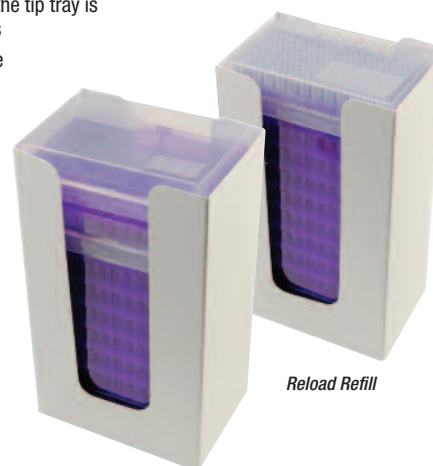
GoldenGate ReloadStacks represent the most efficient, cost-effective and environmentally responsible use of plastic racking components as compared to traditional tip racks. Ten nested tip trays are stacked on an open BoxBase, with the unique Hinged Lid on the top tray

A StarterPack is available, comprising one BoxBase, eight tip trays and one hinged lid plus one extra base with lid to create the first full tip rack.

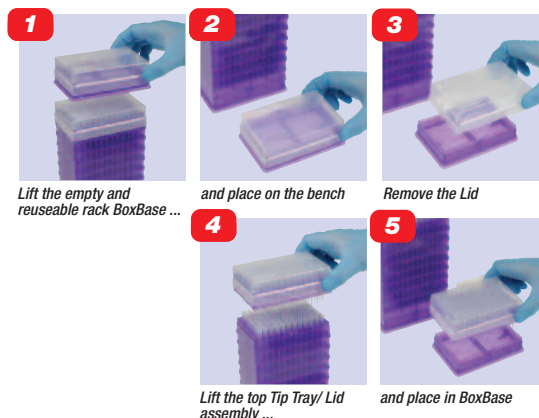


Showing rigid design

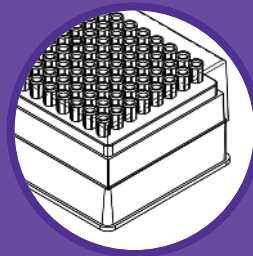
Optimized for multichannel pipetting



Reload Refill



# UniFit™ Universal Fit Pipette Tips



Volume	Color	Sterility	Description	Packaging	Cat.No.
10µl	Clear	No	Microvolume, Short	Bags	BUN001P-BP
<b>LFR™</b> 10µl	Clear	No	Microvolume, Short, LFR™ Low Fluid Retention	Bags	BUN001PL-BP
10µl	Clear	No	Microvolume, Short	Hinged Lid Racks	BUN001P-MR
10µl	Clear	Yes	Microvolume, Short	Hinged Lid Racks	BUN001P-MRS
<b>LFR™</b> 10µl	Clear	No	Microvolume, Short, LFR™ Low Fluid Retention	Hinged Lid Racks	BUN001PL-MR
<b>LFR™</b> 10µl	Clear	Yes	Microvolume, Short, LFR™ Low Fluid Retention	Hinged Lid Racks	BUN001PL-MRS
10µl	Clear	No	Microvolume, Short	MiniStack™	BUN001P-MS
10µl	Clear	Yes	Microvolume, Short	MiniStack™	BUN001P-MSS
<b>LFR™</b> 10µl	Clear	No	Microvolume, Short, LFR™ Low Fluid Retention	MiniStack™	BUN001PL-MS
<b>LFR™</b> 10µl	Clear	Yes	Microvolume, Short, LFR™ Low Fluid Retention	MiniStack™	BUN001PL-MSS
10µl	Clear	No	Microvolume, Short	ReloadStack™	BUN001P-RS
10µl	Clear	Yes	Microvolume, Short	ReloadStack™	BUN001P-RSS
<b>LFR™</b> 10µl	Clear	No	Microvolume, Short, LFR™ Low Fluid Retention	ReloadStack™	BUN001PL-RS
<b>LFR™</b> 10µl	Clear	Yes	Microvolume, Short, LFR™ Low Fluid Retention	ReloadStack™	BUN001PL-RSS
10µl	Clear	No	Microvolume, Short	ReloadStack™ StarterPacks	BUN001P-RSI
<b>LFR™</b> 10µl	Clear	No	Microvolume, Short, LFR™ Low Fluid Retention	ReloadStack™ StarterPacks	BUN001PL-RSI

## 10µl, SHORT

- Fits Gilson Pipetman P2/P10 and Eppendorf Ultra Micro style



Graduation marks at 2 and 10µl



MiniStack™ comprises 5x96 levels of tips

## 10/20µl, EXTENDED

- Fits Gilson Pipetman P2/P10 and Eppendorf Ultra Micro style



10µl/20µl	Clear	No	Microvolume, Extended	Bags	BUN001X-BP
<b>LFR™</b> 10µl/20µl	Clear	No	Microvolume, Extended, LFR™ Low Fluid Retention	Bags	BUN001XL-BP
10µl/20µl	Clear	No	Microvolume, Extended	Hinged Lid Racks	BUN001X-MR
10µl/20µl	Clear	Yes	Microvolume, Extended	Hinged Lid Racks	BUN001X-MRS
<b>LFR™</b> 10µl/20µl	Clear	No	Microvolume, Extended, LFR™ Low Fluid Retention	Hinged Lid Racks	BUN001XL-MR
<b>LFR™</b> 10µl/20µl	Clear	Yes	Microvolume, Extended, LFR™ Low Fluid Retention	Hinged Lid Racks	BUN001XL-MRS
10µl/20µl	Clear	No	Microvolume, Extended	MiniStack™	BUN001X-MS
10µl/20µl	Clear	Yes	Microvolume, Extended	MiniStack™	BUN001X-MSS
<b>LFR™</b> 10µl/20µl	Clear	No	Microvolume, Extended, LFR™ Low Fluid Retention	MiniStack™	BUN001XL-MS
<b>LFR™</b> 10µl/20µl	Clear	Yes	Microvolume, Extended, LFR™ Low Fluid Retention	MiniStack™	BUN001XL-MSS
10µl/20µl	Clear	No	Microvolume, Extended	ReloadStack™	BUN001X-RS
10µl/20µl	Clear	Yes	Microvolume, Extended	ReloadStack™	BUN001X-RSS
<b>LFR™</b> 10µl/20µl	Clear	No	Microvolume, Extended, LFR™ Low Fluid Retention	ReloadStack™	BUN001XL-RS
<b>LFR™</b> 10µl/20µl	Clear	Yes	Microvolume, Extended, LFR™ Low Fluid Retention	ReloadStack™	BUN001XL-RSS
10µl/20µl	Clear	No	Microvolume, Extended	ReloadStack™ StarterPacks	BUN001X-RSI
<b>LFR™</b> 10µl/20µl	Clear	No	Microvolume, Extended, LFR™ Low Fluid Retention	ReloadStack™ StarterPacks	BUN001XL-RSI



Tip easily reaches to the bottom of a microtube

### Packaging Description

**Bags:** 1000 tips/self-standing bag, 10 bags/case

**Hinged Lid Racks:** 96 tips/hinged lid rack, 10 racks/pack, 5 packs/case

**MiniStack™:** 96 tips/tray, 5 stacked trays with lift-off lid, 2 stacks/pack, 5 packs/case

**ReloadStack™:** 96 tips/tray, 10 stacked trays with hinged lid/pack, 5 packs/case

**ReloadStack™ StarterPack:** 96 tips/tray, 8 stacked trays & 1 extra base with hinged lid/pack, 5 packs/case

## 200µl



*BioStor Bin  
for easy  
access to tips  
at the bench*

## 200µl, graduated



*Graduation marks at 10, 50 and 100µl*

*MiniStack  
comprises  
5x96 levels  
of tips*



	Volume	Color	Sterility	Description	Packaging	Cat.No.
	200µl	Clear	No	Bevelled	Bags	BUN0200-BP
	200µl	Yellow	No	Bevelled	Bags	BUY0200-BP
<b>LFR™</b>	200µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	Bags	BUN0200L-BP
	200µl	Yellow	No	Bevelled	BioStor™ Bin (2000 Tips)	BUY0200-BIN
	200µl	Clear	No	Bevelled	Hinged Lid Racks	BUN0200-MR
	200µl	Clear	Yes	Bevelled	Hinged Lid Racks	BUN0200-MRS
	200µl	Yellow	No	Bevelled	Hinged Lid Racks	BUY0200-MR
	200µl	Yellow	Yes	Bevelled	Hinged Lid Racks	BUY0200-MRS
<b>LFR™</b>	200µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	Hinged Lid Racks	BUN0200L-MR
<b>LFR™</b>	200µl	Clear	Yes	Bevelled, LFR™ Low Fluid Retention	Hinged Lid Racks	BUN0200L-MRS
	200µl	Clear	No	Bevelled	MiniStack™	BUN0200-MS
	200µl	Clear	Yes	Bevelled	MiniStack™	BUN0200-MSS
	200µl	Yellow	No	Bevelled	MiniStack™	BUY0200-MS
	200µl	Yellow	Yes	Bevelled	MiniStack™	BUY0200-MSS
<b>LFR™</b>	200µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	MiniStack™	BUN0200L-MS
<b>LFR™</b>	200µl	Clear	Yes	Bevelled, LFR™ Low Fluid Retention	MiniStack™	BUN0200L-MSS
	200µl	Clear	No	Bevelled	ReloadStack™	BUN0200-RS
	200µl	Clear	Yes	Bevelled	ReloadStack™	BUN0200-RSS
	200µl	Yellow	No	Bevelled	ReloadStack™	BUY0200-RS
	200µl	Yellow	Yes	Bevelled	ReloadStack™	BUY0200-RSS
<b>LFR™</b>	200µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	ReloadStack™	BUN0200L-RS
<b>LFR™</b>	200µl	Clear	Yes	Bevelled, LFR™ Low Fluid Retention	ReloadStack™	BUN0200L-RSS
	200µl	Yellow	No	Bevelled	ReloadStack™ StarterPacks	BUY0200-RSI
<b>LFR™</b>	200µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	ReloadStack™ StarterPacks	BUN0200L-RSI

	200µl	Clear	No	Bevelled, Graduated	Bags	BUN020G-BP
	200µl	Yellow	No	Bevelled, Graduated	Bags	BUY020G-BP
<b>LFR™</b>	200µl	Clear	No	Bevelled, Graduated, LFR™ Low Fluid Retention	Bags	BUN020GL-BP
	200µl	Clear	No	Bevelled, Graduated	Hinged Lid Racks	BUN020G-MR
	200µl	Clear	Yes	Bevelled, Graduated	Hinged Lid Racks	BUN020G-MRS
	200µl	Yellow	No	Bevelled, Graduated	Hinged Lid Racks	BUY020G-MR
	200µl	Yellow	Yes	Bevelled, Graduated	Hinged Lid Racks	BUY020G-MRS
<b>LFR™</b>	200µl	Clear	No	Bevelled, Graduated, LFR™ Low Fluid Retention	Hinged Lid Racks	BUN020GL-MR
<b>LFR™</b>	200µl	Clear	Yes	Bevelled, Graduated, LFR™ Low Fluid Retention	Hinged Lid Racks	BUN020GL-MRS
	200µl	Clear	No	Bevelled, Graduated	MiniStack™	BUN020G-MS
	200µl	Clear	Yes	Bevelled, Graduated	MiniStack™	BUN020G-MSS
	200µl	Yellow	No	Bevelled, Graduated	MiniStack™	BUY020G-MS
	200µl	Yellow	Yes	Bevelled, Graduated	MiniStack™	BUY020G-MSS
<b>LFR™</b>	200µl	Clear	No	Bevelled, Graduated, LFR™ Low Fluid Retention	MiniStack™	BUN020GL-MS
<b>LFR™</b>	200µl	Clear	Yes	Bevelled, Graduated, LFR™ Low Fluid Retention	MiniStack™	BUN020GL-MSS
	200µl	Clear	No	Bevelled, Graduated	ReloadStack™	BUN020G-RS
	200µl	Clear	Yes	Bevelled, Graduated	ReloadStack™	BUN020G-RSS
	200µl	Yellow	No	Bevelled, Graduated	ReloadStack™	BUY020G-RS
	200µl	Yellow	Yes	Bevelled, Graduated	ReloadStack™	BUY020G-RSS
<b>LFR™</b>	200µl	Clear	No	Bevelled, Graduated, LFR™ Low Fluid Retention	ReloadStack™	BUN020GL-RS
<b>LFR™</b>	200µl	Clear	Yes	Bevelled, Graduated, LFR™ Low Fluid Retention	ReloadStack™	BUN020GL-RSS
	200µl	Yellow	No	Bevelled	ReloadStack™ StarterPacks	BUY020G-RSI
<b>LFR™</b>	200µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	ReloadStack™ StarterPacks	BUN020GL-RSI

### Packaging Description

**Bags:** 1000 tips/self-standing bag, 10 bags/case

**Hinged Lid Racks:** 96 tips/hinged lid rack, 10 racks/pack, 5 packs/case

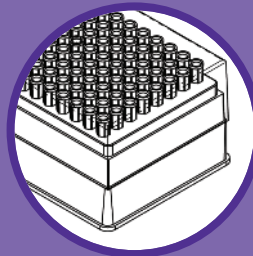
**MiniStack™:** 96 tips/level, 5 stacked levels with lift-off lid, 2 stacks/pack, 5 packs/case

**ReloadStack™:** 96 tips/tray, 10 stacked trays with hinged lid/pack, 5 packs/case

**ReloadStack StarterPack:** 96 tips/tray, 8 stacked trays & 1 extra base with hinged lid/pack, 5 packs/case



# UniFit™ Universal Fit Pipette Tips



Volume	Color	Sterility	Description	Packaging	Cat.No.
300µl	Clear	No	Bevelled	Bags	BUN0300-BP
<b>LFR™</b> 300µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	Bags	BUN0300L-BP
300µl	Clear	No	Bevelled	Hinged Lid Racks	BUN0300-MR
300µl	Clear	Yes	Bevelled	Hinged Lid Racks	BUN0300-MRS
<b>LFR™</b> 300µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	Hinged Lid Racks	BUN0300L-MR
<b>LFR™</b> 300µl	Clear	Yes	Bevelled, LFR™ Low Fluid Retention	Hinged Lid Racks	BUN0300L-MRS
300µl	Clear	No	Bevelled	MiniStack™	BUN0300-MS
300µl	Clear	Yes	Bevelled	MiniStack™	BUN0300-MSS
<b>LFR™</b> 300µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	MiniStack™	BUN0300L-MS
<b>LFR™</b> 300µl	Clear	Yes	Bevelled, LFR™ Low Fluid Retention	MiniStack™	BUN0300L-MSS
300µl	Clear	No	Bevelled	ReloadStack™	BUN0300-RS
300µl	Clear	Yes	Bevelled	ReloadStack™	BUN0300-RSS
<b>LFR™</b> 300µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	ReloadStack™	BUN0300L-RS
<b>LFR™</b> 300µl	Clear	Yes	Bevelled, LFR™ Low Fluid Retention	ReloadStack™	BUN0300L-RSS
300µl	Clear	No	Bevelled	ReloadStack™ StarterPacks	BUN0300-RSI
<b>LFR™</b> 300µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	ReloadStack™ StarterPacks	BUN0300L-RSI

## Packaging Description

**Bags:** 1000 tips/self-standing bag, 10 bags/case

**Hinged Lid Racks:** 96 tips/hinged lid rack, 10 racks/pack, 5 packs/case

**MiniStack™:** 96 tips/tray, 5 stacked trays with lift-off lid, 2 stacks/pack, 5 packs/case

**ReloadStack™:** 96 tips/tray, 10 stacked trays with hinged lid/pack, 5 packs/case

**ReloadStack™ StarterPack:** 96 tips/tray, 8 stacked trays & 1 extra base with hinged lid/pack, 5 packs/case

1000µl	Clear	No	Bevelled	Bags	BUN1000-BP
1000µl	Blue	No	Bevelled	Bags	BUB1000-BP
<b>LFR™</b> 1000µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	Bags	BUN1000L-BP
1000µl	Blue	No	Bevelled	BioStor™ Bin (500 Tips)	BUB1000-BIN
1000µl	Clear	No	Bevelled	Lift-off Lid Racks	BUN1000-MR
1000µl	Clear	Yes	Bevelled	Lift-off Lid Racks	BUN1000-MRS
1000µl	Blue	No	Bevelled	Lift-off Lid Racks	BUB1000-MR
1000µl	Blue	Yes	Bevelled	Lift-off Lid Racks	BUB1000-MRS
<b>LFR™</b> 1000µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	Lift-off Lid Racks	BUN1000L-MR
<b>LFR™</b> 1000µl	Clear	Yes	Bevelled, LFR™ Low Fluid Retention	Lift-off Lid Racks	BUN1000L-MRS
1000µl	Clear	No	Bevelled	MiniStack™	BUN1000-MS
1000µl	Clear	Yes	Bevelled	MiniStack™	BUN1000-MSS
1000µl	Blue	No	Bevelled	MiniStack™	BUB1000-MS
1000µl	Blue	Yes	Bevelled	MiniStack™	BUB1000-MSS
<b>LFR™</b> 1000µl	Clear	No	Bevelled, LFR™ Low Fluid Retention	MiniStack™	BUN1000L-MS
<b>LFR™</b> 1000µl	Clear	Yes	Bevelled, LFR™ Low Fluid Retention	MiniStack™	BUN1000L-MSS

## Packaging Description

**Bags:** 1000 tips/self-standing bag, 10 bags/case

**Lift-off Lid Racks:** 100 tips/lift-off lid rack, 10 racks/pack, 5 packs/case

**MiniStack™:** 100 tips/tray, 5 stacked trays with lift-off lid, 2 stacks/pack, 5 packs/case

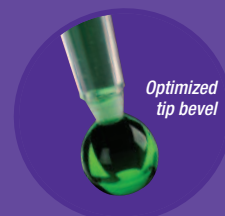
1250µl	Clear	No	Extended UniFit™	Bags	BUN125X-BP
1250µl	Clear	No	Extended UniFit™	96 Tips/Hinged Lid Racks	BUN125X-MR
1250µl	Clear	Yes	Extended UniFit™	96 Tips/Hinged Lid Racks	BUN125X-MRS

## Packaging Description

**Bags:** 500 tips/self-standing bag, 10 bags/case

**Hinged Lid Racks:** 96 tips/rack, 8 racks/pack, 5 packs/case

## 300µl



Optimized  
tip bevel

## 1000µl



BioStor Bin  
for easy  
access to tips  
at the bench

## 1250µl, EXTENDED



↑ ↑ ↑  
Graduation marks at 200, 500 and 1000µl

## 10µl, SHORT



- Fits Gilson Pipetman P2/P10 and Eppendorf Ultra Micro style

## 10µl, EXTENDED



- Fits Gilson Pipetman P2/P10 and Eppendorf Ultra Micro style

## 30µl



## 100µl



## 200µl



## 1000µl



## 1250µl, EXTENDED



↑ ↑ ↑  
Graduation marks at 200, 500 and 1000µl

Volume	Color	Sterility	Description	Packaging	Cat.No.
10µl	Clear	No	Bevelled, Universal Fit	Hinged Lid Racks	BAN001P-MR
10µl	Clear	Yes	Bevelled, Universal Fit	Hinged Lid Racks	BAN001P-MRS
<b>LFR™</b> 10µl	Clear	Yes	Bevelled, Universal Fit, LFR™ Low Fluid Retention	Hinged Lid Racks	BAN001PL-MRS
10µl/20µl	Clear	No	Extended, Universal Fit	Hinged Lid Racks	BAN001X-MR
10µl/20µl	Clear	Yes	Extended, Universal Fit	Hinged Lid Racks	BAN001X-MRS
<b>LFR™</b> 10µl/20µl	Clear	Yes	Extended, Universal Fit, LFR™ Low Fluid Retention	Hinged Lid Racks	BAN001XL-MRS
30µl	Clear	No	Bevelled, Universal Fit	Hinged Lid Racks	BAN0030-MR
30µl	Clear	Yes	Bevelled, Universal Fit	Hinged Lid Racks	BAN0030-MRS
<b>LFR™</b> 30µl	Clear	Yes	Bevelled, Universal Fit, LFR™ Low Fluid Retention	Hinged Lid Racks	BAN0030L-MRS
100µl	Clear	No	Bevelled, Universal Fit	Hinged Lid Racks	BAN0100-MR
100µl	Clear	Yes	Bevelled, Universal Fit	Hinged Lid Racks	BAN0100-MRS
<b>LFR™</b> 100µl	Clear	Yes	Bevelled, Universal Fit, LFR™ Low Fluid Retention	Hinged Lid Racks	BAN0100L-MRS
200µl	Clear	No	Bevelled, Universal Fit	Hinged Lid Racks	BAN0200-MR
200µl	Clear	Yes	Bevelled, Universal Fit	Hinged Lid Racks	BAN0200-MRS
<b>LFR™</b> 200µl	Clear	Yes	Bevelled, Universal Fit, LFR™ Low Fluid Retention	Hinged Lid Racks	BAN0200L-MRS
1000µl	Clear	No	Bevelled, Universal Fit	Lift-off Lid Racks	BAN1000-MR
1000µl	Clear	Yes	Bevelled, Universal Fit	Lift-off Lid Racks	BAN1000-MRS
<b>LFR™</b> 1000µl	Clear	Yes	Bevelled, Universal Fit, LFR™ Low Fluid Retention	Lift-off Lid Racks	BAN1000L-MRS

### Packaging Description

**Bags:** 1000 tips/self-standing bag, 10 bags/case

**Hinged Lid Racks:** 96 tips/hinged lid rack, 10 racks/pack, 5 packs/case

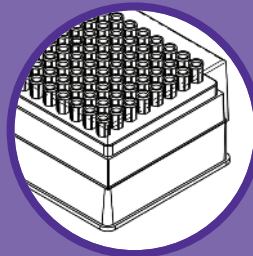
**Lift-off Lid Racks:** 100 tips/lift-off lid rack, 10 racks/pack, 5 packs/case

### Packaging Description

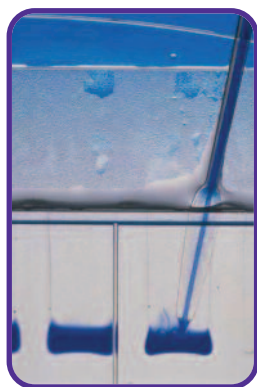
**Bags:** 500 tips/self-standing bag, 10 bags/case

**Hinged Lid Racks:** 96 tips/rack, 8 racks/pack, 5 packs/case

# MicroFlex™ Gel-Loading Tips



- Ideal Tip design for loading electrophoresis gels
- Different shaped ends for various gel apparatus
- UniFit designs to fit all 200µl pipettes



Universal-fitting MicroFlex Gel-Loading Pipette Tips are designed for sample loading of electrophoresis gels. They provide positive-displacement accuracy and reproducibility using Pipetman, Eppendorf, and most other single channel air-displacement pipettors. RNase/DNase-free MicroFlex Tips comprise three styles, each featuring a flexible, 33mm long, 5µl microcapillary tube sections:

- Round-shaft Tip, with 0.57mm OD tube end - these greatly improve loading techniques for 0.75, 1.0 and 1.5mm PAGE gels.
- Intermediate 0.37mm OD flat Tip is ideal for loading 0.4mm sequencing gels.
- Ultra-thin 0.17mm OD ultra-flat Tip is perfect for loading 0.2mm wedge-spacer gels.

MicroFlex Gel-Loading Pipette Tips are not suitable for use with multichannel pipettors, and neither should they be autoclaved.

*Tip ends can be fully inserted into gels, enabling them to be filled equally from the bottom up, thus providing a uniform environment for electrophoresis.*

Volume	Color	Sterility	Description	Packaging	Cat.No.
200µl	Clear	No	Universal Fit Type, 0.57mm Round	Lift-off Lid Rack	BMN520R-LR
200µl	Clear	Yes	Universal Fit Type, 0.57mm Round	Lift-off Lid Rack	BMN520R-LRS
200µl	Clear	No	Universal Fit Type, 0.37mm Flat	Lift-off Lid Rack	BMN320F-LR
200µl	Clear	Yes	Universal Fit Type, 0.37mm Flat	Lift-off Lid Rack	BMN320F-LRS
200µl	Clear	No	Universal Fit Type, 0.17mm Ultra Flat	Lift-off Lid Rack	BMN120U-LR
200µl	Clear	Yes	Universal Fit Type, 0.17mm Ultra Flat	Lift-off Lid Rack	BMN120U-LRS

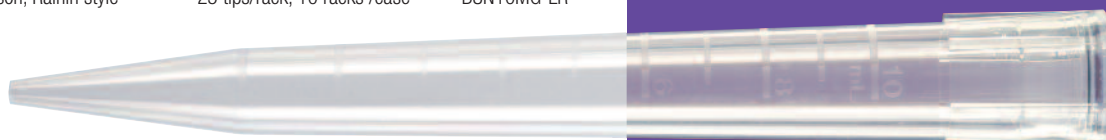
**Packaging Description** Lift-off Lid Racks: 200 tips/rack, 4 racks/case

## Macro Pipette Tips

5ml	Clear	No	Macro, Eppendorf, Socorex, Biohit style	250 tips/bag, 10 bags /case	BUN05ME-BP
5ml	Clear	No	Macro, Eppendorf, Socorex, Biohit style	50 tips/rack, 10 racks /case	BUN05ME-LR
5ml	Clear	No	Macro, Gilson, Rainin style	250 tips/bag, 10 bags /case	BUN05MG-BP
5ml	Clear	No	Macro, Gilson, Rainin style	50 tips/rack, 10 racks /case	BUN05MG-LR
10ml	Clear	No	Macro, Eppendorf, Gilson, Rainin style	200 tips/bag, 10 bags /case	BUN10MG-BP
10ml	Clear	No	Macro, Eppendorf, Gilson, Rainin style	25 tips/rack, 10 racks /case	BUN10MG-LR



↑ ↑ ↑ ↑ ↑  
Graduation marks at 0.5ml intervals



↑ ↑ ↑ ↑ ↑  
Graduation marks at 1ml intervals



## Standard Tips

## Filter Barrier Tips

### BioHit

		10µl Short BUN001P	10/20µl Extended BUN001X	200µl BUY0200	200µl Graduated BUY020G	300µl BUN0300	1000µl BUB1000	1250µl BUN125X
Picus/e-Line Single, 8 and 12 channel	0.2-10µl	✓	✓					
	5-120µl			✓	✓	✓		
	10-300µl			✓	✓	✓		
	50-1000µl						✓	✓
ProLine / ProLine Plus / m-Line Single channel	0.1-2.5µl (ProLine)	✓	✓					
	0.1-3µl (m/Plus)	✓	✓					
	0.5-10µl	✓	✓					
	2-20µl			✓	✓			
	5-50µl (ProLine)			✓	✓			
	10-100µl			✓	✓	✓		
	20-200µl					✓		
ProLine / ProLine Plus / m-Line 8 and 12 channel	100-1000µl						✓	✓
	0.5-10µl	✓	✓					
	5-50µl (ProLine)			✓	✓	✓		
	5-100µl (m)			✓	✓	✓		
	10-100µl (Plus)			✓	✓	✓		
	30-300µl (m/Plus)			✓	✓	✓		
	50-300µl (ProLine)			✓	✓	✓		

### BrandTech

Transferpette Single channel	0.5-10µl	✓	✓					
	2-20µl			✓	✓			
	5-50µl			✓	✓			
	10-100µl			✓	✓	✓		
	20-200µl			✓	✓	✓		
	100-1000µl						✓	
Transferpette 8 and 12 channel	0.5-10µl	✓	✓					
	5-50µl			✓	✓			
	10-100µl			✓	✓	✓		
	20-200µl			✓	✓	✓		
	30-300µl			✓	✓	✓		

### Capp

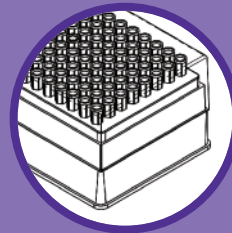
AERO Single, 8 and 12 channel	0.2-2µl	✓	✓					
	0.5-10µl	✓	✓					
	2-20µl			✓	✓			
	5-50µl			✓	✓			
	10-100µl			✓	✓	✓		
	20-200µl			✓	✓	✓		
	30-300µl (8/12ch)			✓	✓	✓		
	100-1000µl						✓	✓

	10µl Short BAN001P	10/20µl Extended BAN001X	30µl BAN0030	100µl BAN0100	200µl BAN0200	1000µl BAN1000	1250µl BAN125X
	✓	✓					
			✓	✓			
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# Pipette Tip Compatibility



## Standard Tips

## Filter Barrier Tips

10µl Short BUN001P	10/20µl Extended BUN001X	200µl BUY0200	200µl Graduated BUY020G	300µl BUN0300	1000µl BUB1000	1250µl BUN125X
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					✓	✓

10µl Short BAN001P	10/20µl Extended BAN001X	30µl BAN0030	100µl BAN0100	200µl BAN0200	1000µl BAN1000	1250µl BAN125X
✓	✓					
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### Eppendorf

0.1-2.5µl (UltraMicro)	Research Single, 8 and 12 channel
0.5-10µl (UltraMicro)	
2-20µl	
10-100µl	
20-200µl	
30-300µl (8/12ch)	
100-1000µl	Reference Single channel
0.1-2.5µl (UltraMicro)	
0.5-10µl (UltraMicro)	
2-20µl (UltraMicro)	
2-20µl	
10-100µl	
20-200µl	Xplorer Single, 8 & 12 channel
100-1000µl	
0.5-10µl (UltraMicro)	
5-100µl	
15-300µl	
50-1000µl	

### Finnpipette

0.2-2µl (Micro)	F2 Single channel
1-10µl (Micro)	
2-20µl (Micro)	
2-20µl	
10-100µl	
20-200µl	
100-1000µl	F2 8 and 12 channel
5-50µl	
30-300µl	
0.5-5µl (Micro)	Focus Single channel
1-10µl (Micro)	
3-30µl	
5-50µl	
10-100µl	
30-300µl	
100-1000µl	Focus 8 and 12 channel
1-10µl	
5-50µl	
30-300µl	

### Fisherbrand

2-20µl	Single channel
5-50µl	
10-100µl	
20-200µl	
100-1000µl	

## Standard Tips

## Filter Barrier Tips

### Fisherbrand

8 and 12 channel	5-50µl
	50-300µl

10µl Short BUN001P	10/20µl Extended BUN001X	200µl BUY0200	200µl Graduated BUY020G	300µl BUN0300	1000µl BUB1000	1250µl BUN125X
		✓	✓	✓		
		✓	✓	✓		

10µl Short BAN001P	10/20µl Extended BAN001X	30µl BAN0030	100µl BAN0100	200µl BAN0200	1000µl BAN1000	1250µl BAN125X
		✓	✓			
				✓		

### Gilson

Pipetman Classic / Neo Single channel	0.2-2µl
	1-10µl
	2-20µl
	20-100µl (Classic)
	50-200µl (Classic)
	200-1000µl (Classic)

✓	✓					
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				✓		
					✓	✓

### Labnet / HTL / Axygen

Discovery Comfort / Pro Labmate / Axyper Single channel	0.2-2µl
	0.5-10µl
	2-20µl
	10-100µl
	20-200µl
	100-1000µl
Discovery Comfort / Pro Labmate / Axyper 8 and 12 channel	1-10µl
	5-50µl
	20-200µl
	50-300µl

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### Matrix

Impact <sup>2</sup> Single, 8 & 12 channel	2-125µl
	5-250µl

		✓	✓	✓		
		✓	✓	✓		

			✓	✓		
				✓		

### Mettler Toledo

Rainin Classic / XLS Single, 8 & 12 channel	0.1-2µl
	0.5-10µl
	2-20µl
	10-100µl
	20-200µl
	100-1000µl

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### Nichiryo

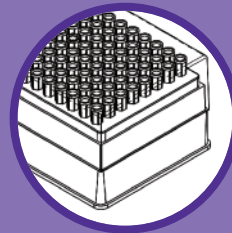
Nichipet EX / Benchmate Single, 8 & 12 channel	0.1-2µl
	0.5-10µl
	2-20µl
	10-100µl
	20-200µl
	100-1000µl

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					✓	✓



# Pipette Tip Compatibility



## Standard Tips

## Filter Barrier Tips

10µl Short BUN001P	10/20µl Extended BUN001X	200µl BUY0200	200µl Graduated BUY020G	300µl BUN0300	1000µl BUB1000	1250µl BUN125X
✓	✓					
✓	✓					
		✓	✓			
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		✓	✓	✓		
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		✓	✓	✓		

10µl Short BAN001P	10/20µl Extended BAN001X	30µl BAN0030	100µl BAN0100	200µl BAN0200	1000µl BAN1000	1250µl BAN125X
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### Socorex

0.1-2µl	Acura Single channel
1-10µl	
2-20µl	
5-50µl	
10-100µl	
20-200µl	
100-1000µl	Acura 8 and 12 channel
0.5-10µl	
5-50µl	
40-350µl	

### VistaLab

0.2-2µl	Ovation Bionatural Single, 8 and 12 channel
1-10µl	
2-20µl	
10-100µl	
2-125µl (8/12ch)	
20-200µl	
5-250µl (8/12ch)	

### VWR

0.2-2µl	Signature / UHP Single channel
0.5-10µl	
2-20µl	
10-100µl	
20-200µl	
100-1000µl	
1-10µl	Signature / UHP 8 and 12 channel
5-50µl	
20-200µl	
50-300µl	

This table has been created using our best endeavors and is intended to be a general guide only, with no guarantee of fit to specific pipettes. GoldenGate Bioscience suggests trial with sample tips and recommends contacting your local distributor to request these at no cost.  
Note: 1) Some tips may require adjustment of ejector to eject smoothly. 2) Confirm the maximum tip working volume. In some cases, the pipette maximum volume can be more than the tip's maximum working volume.

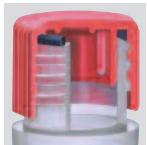
GoldenGate Bioscience products for sample storage include the company's renowned **ClickSeal™**

**MicroCentrifuge Tubes**, **BioStor™ Screw-Cap Vials** for



the ultimate security in sample storage and transportation, plus **MicroTube Rack System™**, the industry standard for deep-well microtiter plates with removable wells

GoldenGate higher-capacity **ClickSeal MicroCentrifuge Tubes** offer superior user confidence in the seal as the caps “click” when closed. Additionally, the ClickSeal design allows repeated cap closures and eliminates pressure-induced popping during incubation procedures. 0.65ml, 1.7ml and 2.0ml sizes fit all popular microcentrifuge rotors.



GoldenGate **BioStor™ Screw-Cap Vials** serve a wide range of life science laboratory needs, including sample collection, processing, centrifugation, long-term storage and packaging/shipping of biological reagents. Screw caps feature a circular 3mm syringe port which is easily pierced for either access of hazardous materials or fraction collecting. The vials' uniform, thick-walled construction, with reinforced support collar, allows high speed centrifugation to 17,000xg. Manufactured from inert, LN<sub>2</sub>-grade polypropylene, sample viability is protected at extreme temperatures ranging from -195°C (LN<sub>2</sub> vapor phase) to +121°C.



MTRS

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*better by design*





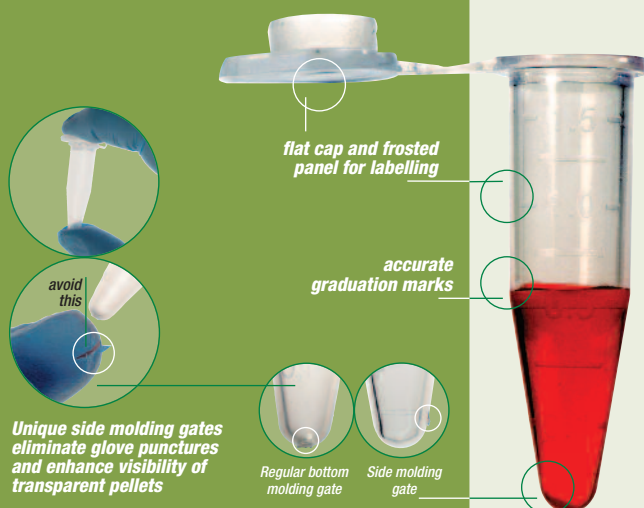
# storage

## MicroTube Rack System™

has become the industry standard for deep-well microtiter plates with removable wells.

Featuring an 8 x 12 hole-pattern MicroRack Base and the traditional 9mm spacing of 1.1ml to 1.2ml MicroTubes (with or without CapStrips affixed), the entire System conforms to the SBS footprint/configuration compatible with robotic workstations, multichannel pipettors, and auto-sampling instruments. Inert polypropylene Tubes, Rack and Lid can be autoclaved, centrifuged at moderate speeds, and stacked for long-term storage of biological samples.



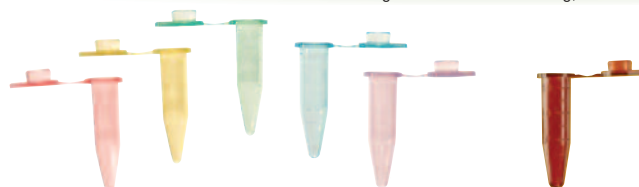


- ▶ **ClickSeal™ for the ultimate in sample security** - caps “click” when closing while maintain easy opening
- ▶ **LFR™ (Low Fluid Retention) Resin Technology** - available in most styles for minimal sample retention and maximum sample integrity
- ▶ **Will withstand up to 27,000 x g**, in fully supported rotors
- ▶ **Temperature range from -80°C to +121°C**
- ▶ **Boiling or freezing of tubes** will not pop caps open
- ▶ **Available in multiple colors** - natural/clear, amber and five transparent colors, the latter as either single color option or five color RainbowPacks
- ▶ **Packed in premium, self-standing DispenserPacks, sterile and non-sterile**, by gamma irradiation

0.65ml



	Volume	Color	Sterility	Description	Packaging, per Pack	Packs/Case	Cat.No.
	0.65ml	Natural	No	MicroCentrifuge Tubes	1000/Self-standing Bag	5	BCN0640-BP
LFR™	0.65ml	Natural	No	MicroCentrifuge Tubes, LFR™	500/Self-standing Bag	5	BCN0640L-BP
	0.65ml	Rainbow	No	MicroCentrifuge Tubes	200 of each Color/Bag, 5 Bags/Pack	5	BCA0640-BP
	0.65ml	Amber	No	MicroCentrifuge Tubes	1000/Self-standing Bag	5	BCM0640-BP
	0.65ml	Select Color	No	MicroCentrifuge Tubes	1000/Self-standing Bag	5	BC*0640-BP
	0.65ml	Natural	Yes	MicroCentrifuge Tubes	50/Bag, 5 Bags/Pack	10	BCN0640-PS
LFR™	0.65ml	Natural	Yes	MicroCentrifuge Tubes, LFR™	50/Bag, 5 Bags/Pack	5	BCN0640L-PS
	0.65ml	Rainbow	Yes	MicroCentrifuge Tubes	50/Bag, Mixed Colors, 5 Bags/Pack	10	BCA0640-PS



Zip-Lock,  
Self-Standing  
DispenserBags



1.7ml



	1.7ml	Natural	No	MicroCentrifuge Tubes	500/Self-standing Bag	10	BCN1700-BP
LFR™	1.7ml	Natural	No	MicroCentrifuge Tubes, LFR™	500/Self-standing Bag	5	BCN1700L-BP
	1.7ml	Rainbow	No	MicroCentrifuge Tubes	100 of each Color/Bag, 5 Bags/Pack	10	BCA1700-BP
	1.7ml	Amber	No	MicroCentrifuge Tubes	500/Self-standing Bag	10	BCM1700-BP
	1.7ml	Select Color	No	MicroCentrifuge Tubes	500/Self-standing Bag	10	BC*1700-BP
	1.7ml	Natural	Yes	MicroCentrifuge Tubes	50/Bag, 5 Bags/Pack	10	BCN1700-PS
LFR™	1.7ml	Natural	Yes	MicroCentrifuge Tubes, LFR™	50/Bag, 5 Bags/Pack	5	BCN1700L-PS
	1.7ml	Rainbow	Yes	MicroCentrifuge Tubes	50/Bag, Mixed Colors, 5 Bags/Pack	10	BCA1700-PS
	1.7ml	Clear	No	MicroCentrifuge Tubes	500/BioStor™ Bin	1	BCN1700-BIN



BioStor Bin for  
easy access to  
microcentrifuge  
tubes at the bench



\*Select color of choice by using color code: **R**=Red, **Y**=Yellow, **G**=Green, **B**=Blue, **V**=Violet, **M**=Amber

# ClickSeal™ MicroCentrifuge Tubes



2.0ml

Volume	Color	Sterility	Description	Packaging, per Pack	Packs/Case	Cat.No.
2.0ml	Natural	No	MicroCentrifuge Tubes	400/Self-standing Bag	10	BCN2000-BP
<b>LFR™</b> 2.0ml	Natural	No	MicroCentrifuge Tubes, LFR™	400/Self-standing Bag	5	BCN2000L-BP
2.0ml	Rainbow	No	MicroCentrifuge Tubes	80 of each Color/Bag, 5 Bags/Pack	10	BCA2000-BP
2.0ml	Amber	No	MicroCentrifuge Tubes	400/Self-standing Bag	10	BCM2000-BP
2.0ml	Select Color	No	MicroCentrifuge Tubes	400/Self-standing Bag	10	BC*2000-BP
2.0ml	Natural	Yes	MicroCentrifuge Tubes	50/Bag, 4 Bags/Pack	10	BCN2000-PS
<b>LFR™</b> 2.0ml	Natural	Yes	MicroCentrifuge Tubes, LFR™	50/Bag, 4 Bags/Pack	5	BCN2000L-PS
2.0ml	Rainbow	Yes	MicroCentrifuge Tubes	50/Bag, Mixed Colors, 4 Bags/Pack	10	BCA2000-PS



\*Select color of choice by using color code:

**R**=Red, **Y**=Yellow, **G**=Green, **B**=Blue, **V**=Violet, **M**=Amber

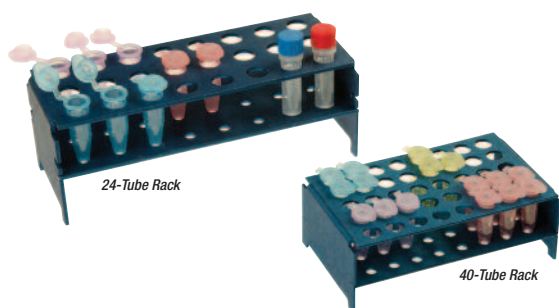
## BioStor™ Freezer Storage Boxes



Color	Description	Packaging: per Pack	per Case	Cat.No.
Blue	Box with Lid, Capacity 50 Tubes/Vials, 0.75-2.0ml	4 Boxes	6 Packs	BRP50-12CT

- Ideal for low temperature storage of samples
- Accommodates 1.5ml to 2.0ml microcentrifuge tubes or 0.75-2.0ml screw-cap vials, 50x
- Molded in durable polypropylene for long life
- Fully autoclavable and will not absorb water or degrade like cardboard
- Translucent lid, with frosted writing surface, for easy sample identification

## BioStor™ Tube and Vial Racks



- Manufactured of anodized aluminum
- Durable, chemical and corrosion resistant
- Can be frozen or autoclaved
- 40-Tube Rack suitable for single 0.5ml PCR tubes or 0.5ml microcentrifuge tubes
- 24-Tube Rack suitable for 1.5ml/2.0ml microcentrifuge tubes, 0.75-2.0ml screw-cap vials
- Very securely stackable for long-term storage in -80°C freezers

Color	Description	Packaging	Cat.No.
Blue	Storage Rack, Capacity 40 Tubes, 0.5-0.65ml	Each	BRS40-05MT
Blue	Storage Rack, Capacity 24 Tubes/Vials, 0.75-2.0ml	Each	BRS24-15MT
Grey	BioStor™ Floater, Neoprene, 16 places for 0.5-2.0ml Tubes/Vials	10/Pk, 5 Pks/Case	BRF16-15MT



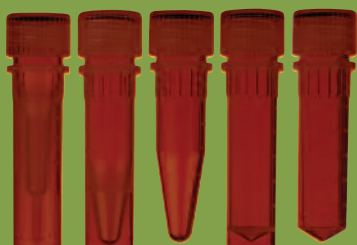
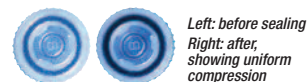
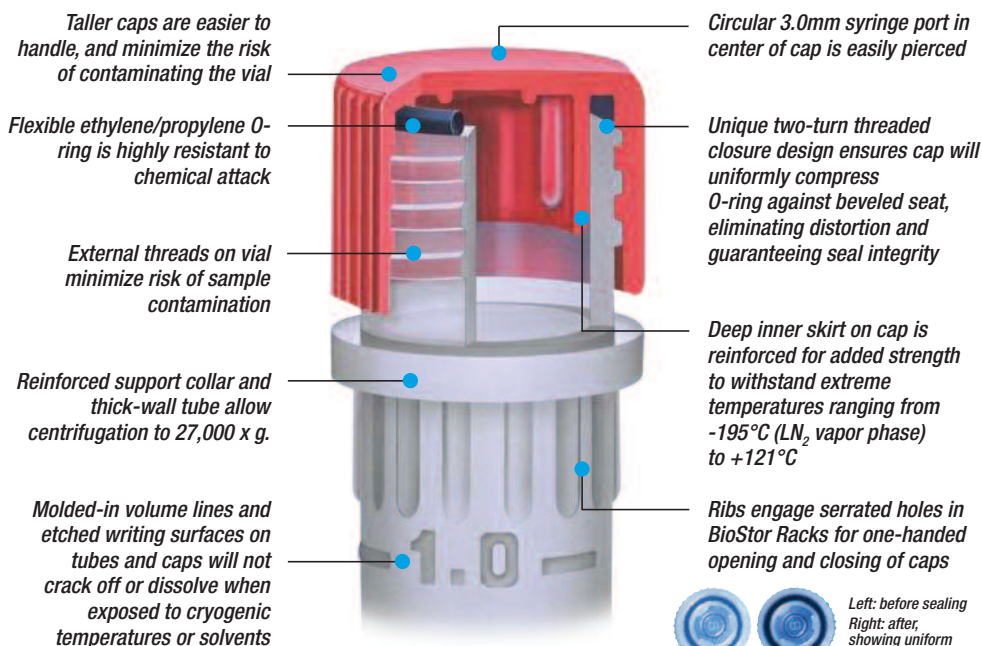
### BioStor™ Floater

- Ideal for incubation of samples in microcentrifuge tubes
- Microwavable polyfoam
- Ensures microtubes are immersed at same depth
- Capacity: 4x 0.5ml plus 12x 1.5ml/2.0ml microcentrifuge tubes or screw-cap vials
- Fits in 600ml glass beaker

### Screw-Cap Vials

The multi-purpose design of GoldenGate screw-cap vials serve a wide range of life science laboratory needs. These include sample collection and processing, centrifugation, long-term storage plus the packaging/shipping of valuable biological reagents such as Antibodies, Proteins, and DNA & RNA Oligonucleotides, etc.

Screw caps features circular 3mm syringe port which is easily pierced for either access of hazardous materials or fraction collecting. The vials' uniform, thick walled construction, with reinforced support collar, allows high speed centrifugation to 17,000xg. Manufactured from inert, LN<sub>2</sub>-grade polypropylene, sample viability is protected at extreme temperatures ranging from -195°C (LN<sub>2</sub> vapor phase) to +121°C.



- Light or Dark Amber color options for optimal light blocking requirements
- Vials and Caps are supplied in same Amber color

Volume	Color	Sterility	Description	Packaging	Cat.No.
0.75ml	Natural	No	Skirted Bottom Vials Only	500 Vials/Bag, 10 Bags/Case	BBSVS75-BP
1.6ml	Natural	No	Skirted Bottom Vials Only	500 Vials/Bag, 10 Bags/Case	BBSVS16-BP
1.6ml	Natural	No	Conical Bottom Vials Only	500 Vials/Bag, 10 Bags/Case	BBSVC16-BP
2.0ml	Natural	No	Skirted Bottom Vials Only	500 Vials/Bag, 10 Bags/Case	BBSVS20-BP
2.0ml	Natural	No	Conical Bottom Vials Only	500 Vials/Bag, 10 Bags/Case	BBSVC20-BP
-	Natural	No	Screw Caps Only	500 Caps /Bag, 10 Bags/Case	BBCAPNA-BP
-	Select Color	No	Screw Caps Only	500 Caps /Bag, 10 Bags/Case	BBCAP**-BP
0.75ml	Light Amber	No	Skirted Bottom Vials and Screw Caps	500 Vials/Caps /Bag, 2 Bags/Case	BBS75AM-BP
1.6ml	Light Amber	No	Skirted Bottom Vials and Screw Caps	500 Vials/Caps /Bag, 2 Bags/Case	BBS16AM-BP
1.6ml	Light Amber	No	Conical Bottom Vials and Screw Caps	500 Vials/Caps /Bag, 2 Bags/Case	BBC16AM-BP
2.0ml	Light Amber	No	Skirted Bottom Vials and Screw Caps	500 Vials/Caps /Bag, 2 Bags/Case	BBS20AM-BP
2.0ml	Light Amber	No	Conical Bottom Vials and Screw Caps	500 Vials/Caps /Bag, 2 Bags/Case	BBC20AM-BP
0.75ml	Dark Amber	No	Skirted Bottom Vials and Screw Caps	500 Vials/Caps /Bag, 2 Bags/Case	BBS75DA-BP
1.6ml	Dark Amber	No	Skirted Bottom Vials and Screw Caps	500 Vials/Caps /Bag, 2 Bags/Case	BBS16DA-BP
1.6ml	Dark Amber	No	Conical Bottom Vials and Screw Caps	500 Vials/Caps /Bag, 2 Bags/Case	BBC16DA-BP
2.0ml	Dark Amber	No	Skirted Bottom Vials and Screw Caps	500 Vials/Caps /Bag, 2 Bags/Case	BBS20DA-BP
2.0ml	Dark Amber	No	Conical Bottom Vials and Screw Caps	500 Vials/Caps /Bag, 2 Bags/Case	BBC20DA-BP

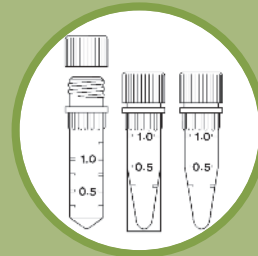
\*\* Select cap color of choice by using color code:

WT=White, RD=Red, OR=Orange, YL=Yellow, GN=Green, BL=Blue, VT=Violet, AM=Light Amber, DA=Dark Amber

These AM and DA Cap color codes apply only to the BulkPack Caps and the Amber Vials shown on this page, not to any Caps or Vials shown on page 21.



# BioStor™ Screw-Cap Vials



Volume	Cap Color	Sterility	Description	Packaging	Cat.No.
0.75ml	Natural	No	Skirted Bottom Vials and Screw Caps	A	BBS75NA-BP
0.75ml	Rainbow	No	Skirted Bottom Vials and Screw Caps	B	BBS75AS-BP
0.75ml	Select Color	No	Skirted Bottom Vials and Screw Caps	A	BBS75**-BP
0.75ml	Natural	Yes	Skirted Bottom Vials and Screw Caps	C	BBS75NA-PS
0.75ml	Rainbow	Yes	Skirted Bottom Vials and Screw Caps	D	BBS75AS-PS
0.75ml	Select Color	Yes	Skirted Bottom Vials and Screw Caps	C	BBS75**-PS

*RainbowPack = Assorted Cap Colors comprising Red, Yellow, Green, Blue and Violet, 2 Bags of each Cap Color*

1.6ml	Natural	No	Skirted Bottom Vials and Screw Caps	A	BBS16NA-BP
1.6ml	Rainbow	No	Skirted Bottom Vials and Screw Caps	B	BBS16AS-BP
1.6ml	Select Color	No	Skirted Bottom Vials and Screw Caps	A	BBS16**-BP
1.6ml	Natural	Yes	Skirted Bottom Vials and Screw Caps	C	BBS16NA-PS
1.6ml	Rainbow	Yes	Skirted Bottom Vials and Screw Caps	D	BBS16AS-PS
1.6ml	Select Color	Yes	Skirted Bottom Vials and Screw Caps	C	BBS16**-PS

*RainbowPack = Assorted Cap Colors comprising Red, Yellow, Green, Blue and Violet, 2 Bags of each Cap Color*

1.6ml	Natural	No	Conical Bottom Vials and Screw Caps	A	BBC16NA-BP
1.6ml	Rainbow	No	Conical Bottom Vials and Screw Caps	B	BBC16AS-BP
1.6ml	Select Color	No	Conical Bottom Vials and Screw Caps	A	BBC16**-BP
1.6ml	Natural	Yes	Conical Bottom Vials and Screw Caps	C	BBC16NA-PS
1.6ml	Rainbow	Yes	Conical Bottom Vials and Screw Caps	D	BBC16AS-PS
1.6ml	Select Color	Yes	Conical Bottom Vials and Screw Caps	C	BBC16**-PS

*RainbowPack = Assorted Cap Colors comprising Red, Yellow, Green, Blue and Violet, 2 Bags of each Cap Color*

2.0ml	Natural	No	Skirted Bottom Vials and Screw Caps	A	BBS20NA-BP
2.0ml	Rainbow	No	Skirted Bottom Vials and Screw Caps	B	BBS20AS-BP
2.0ml	Select Color	No	Skirted Bottom Vials and Screw Caps	A	BBS20**-BP
2.0ml	Natural	Yes	Skirted Bottom Vials and Screw Caps	C	BBS20NA-PS
2.0ml	Rainbow	Yes	Skirted Bottom Vials and Screw Caps	D	BBS20AS-PS
2.0ml	Select Color	Yes	Skirted Bottom Vials and Screw Caps	C	BBS20**-PS

*RainbowPack = Assorted Cap Colors comprising Red, Yellow, Green, Blue and Violet, 2 Bags of each Cap Color*

2.0ml	Natural	No	Conical Bottom Vials and Screw Caps	A	BBC20NA-BP
2.0ml	Rainbow	No	Conical Bottom Vials and Screw Caps	B	BBC20AS-BP
2.0ml	Select Color	No	Conical Bottom Vials and Screw Caps	A	BBC20**-BP
2.0ml	Natural	Yes	Conical Bottom Vials and Screw Caps	C	BBC20NA-PS
2.0ml	Rainbow	Yes	Conical Bottom Vials and Screw Caps	D	BBC20AS-PS
2.0ml	Select Color	Yes	Conical Bottom Vials and Screw Caps	C	BBC20**-PS

*RainbowPack = Assorted Cap Colors comprising Red, Yellow, Green, Blue and Violet, 2 Bags of each Cap Color*

## Packaging Description

**A** = 500 Caps/Bag, 500 Vials/Bag, 2 Bags of each/Case

**B** = 5x MiniBags of 100 Caps (of each color)/Bag and 500 Vials/Bag, 2 Bags of each/Case

**C** = 50 Assembled Natural or Single Color Caps with Vials/Bag, 10 Bags/Case, Sterile

**D** = 50 Assembled Rainbow/Mixed Color Caps with Vials/Bag, 10 Bags/Case, Sterile

## 0.75ml



## 1.6ml



## 2.0ml

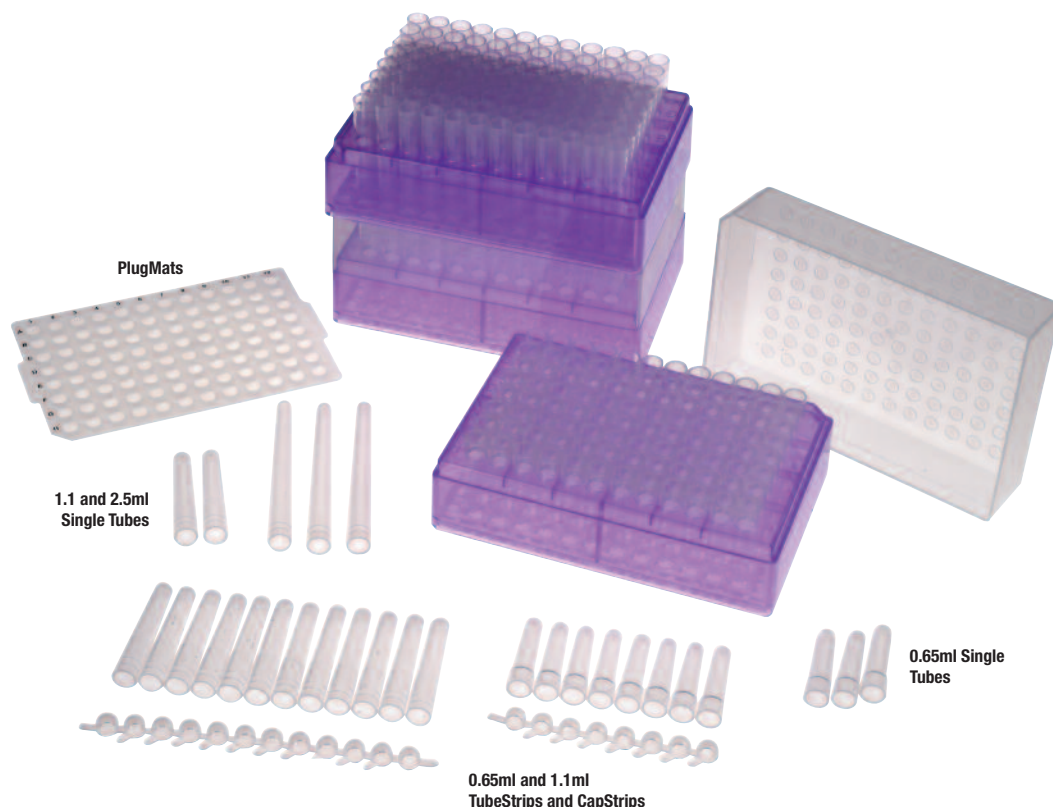


**\*\* Select color of choice by using color code:**

**WT**=White, **RD**=Red, **OR**=Orange, **YL**=Yellow,

**GN**=Green, **BL**=Blue, **VT**=Violet

- Available in 0.65ml Single MicroTubes and 8-TubeStrips™, or 1.1ml Single MicroTubes™ and 8-/12-TubeStrips™, and 8-/12-CapStrips™
- 96-well rack footprint compatible with Beckman, Tecan and other robotic workstations
- One-way lid design, in conjunction with alpha-numeric grid, ensures positive sample identification
- Cover 'molded-in condensation rings' minimize cross contamination
- Polypropylene tubes and racks are autoclavable



*positive  
identification of  
every well*

*SBS footprint for  
automation  
systems*

*available barcoded  
for sample  
identification*

**The MicroTube Rack System™ has become the industry standard for deep-well microtiter plates with removable wells.** Featuring a rack with an 8 x 12 hole-pattern on traditional 9mm centers, the entire System conforms to the SBS footprint/configuration compatible with robotic workstations, multichannel pipettors, and auto-sampling instruments. Alpha-numeric, non-reversing Rack and Lid ensure positive sample identification. Lid, with individual condensation rings above each Tube, prevents cross-contamination. The inert polypropylene Tubes, Rack and Lid can be autoclaved, centrifuged at moderate speeds, and stacked for long-term storage of biological samples.

The System is ideal for :

- Bacterial and hybridoma cell uptake
- CMV, HSV, HTLV-III testing
- RIA/EIA serial dilution procedures
- Pharmaceutical and human genome studies
- Cell harvesting
- Receptor binding assays
- Recombinant DNA work
- Sample storage libraries

Available Non-Sterile or Sterile, in three sizes of autoclavable polypropylene Single Tubes, and in 8- or 12-TubeStrips. CapStrips are available either Non-Vented or Vented (neither are autoclavable). Non-Vented are used primarily during the aggressive shaking employed in plant DNA assays, while snug-fitting Vented CapStrips are ideal for most other applications as they will not pop during heated incubation or -80°C freezing. Silicone rubber PlugMats, with alpha-numeric labeling, seal all 96 Tubes simultaneously. CapStrips or PlugMats can be used to securely seal all 96 MicroTubes (under Rack Lids) for long-term sample storage. 2.5ml Single Tubes are also available in bulk bags or in SBS footprint racks.

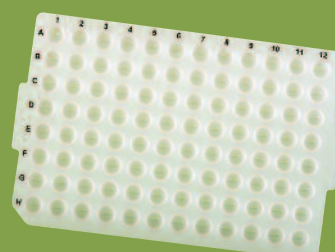
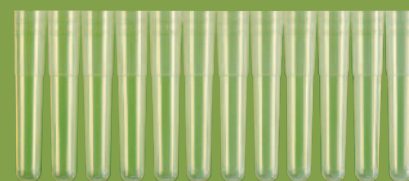
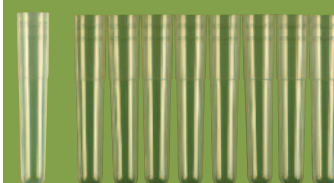
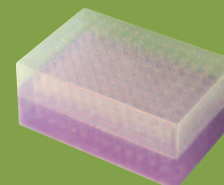
# MicroTube Rack System™



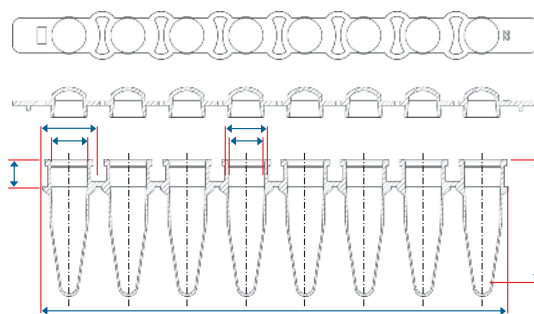
Volume*	Color	Sterility	Description	Packaging	Cat.No.
0.65ml	Natural	No	MicroTube Rack System™, Single Tubes in Bags	A	BTN0933-01B
0.65ml	Natural	No	MicroTube Rack System™, 8-TubeStrips in Cartons	B	BTN0933-08B
0.65ml	Natural	No	MicroTube Rack System™, Single Tubes in Racks	D	BTN0933-01R
0.65ml	Natural	Yes	MicroTube Rack System™, Single Tubes in Racks	D	BTN0933-01RS
0.65ml	Natural	No	MicroTube Rack System™, 8-TubeStrips in Racks	E	BTN0933-08R
0.65ml	Natural	Yes	MicroTube Rack System™, 8-TubeStrips in Racks	E	BTN0933-08RS
1.1ml	Natural	No	MicroTube Rack System™, Single Tubes in Bags	A	BTN0946-01B
1.1ml	Natural	No	MicroTube Rack System™, 8-TubeStrips in Cartons	B	BTN0946-08B
1.1ml	Natural	No	MicroTube Rack System™, 12-TubeStrips in Cartons	C	BTN0946-12B
1.1ml	Natural	No	MicroTube Rack System™, Single Tubes in Racks	D	BTN0946-01R
1.1ml	Natural	Yes	MicroTube Rack System™, Single Tubes in Racks	D	BTN0946-01RS
1.1ml	Natural	No	MicroTube Rack System™, 8-TubeStrips in Racks	E	BTN0946-08R
1.1ml	Natural	Yes	MicroTube Rack System™, 8-TubeStrips in Racks	E	BTN0946-08RS
1.1ml	Natural	No	MicroTube Rack System™, 12-TubeStrips in Racks	F	BTN0946-12R
1.1ml	Natural	Yes	MicroTube Rack System™, 12-TubeStrips in Racks	F	BTN0946-12RS
2.5ml	Natural	No	MicroTube Rack System™, Single Tubes in Bags	A	BTN0980-01B
2.5ml	Natural	No	MicroTube Rack System™, Single Tubes in Racks	H	BTN0980-01R
2.5ml	Natural	Yes	MicroTube Rack System™, Single Tubes in Racks	H	BTN0980-01RS
-	Natural	No	MicroTube Rack System™ 8-CapStrips, Vented	B	BTN3346-08C
-	Natural	Yes	MicroTube Rack System™ 8-CapStrips, Vented	B	BTN3346-08CS
-	Natural	No	MicroTube Rack System™ 12-CapStrips, Vented	C	BTN3346-12C
-	Natural	Yes	MicroTube Rack System™ 12-CapStrips, Vented	C	BTN3346-12CS
-	Natural	No	MicroTube Rack System™ 8-CapStrips, Non-Vented	B	BTN3346-09C
-	Natural	Yes	MicroTube Rack System™ 8-CapStrips, Non-Vented	B	BTN3346-09CS
-	Natural	No	MicroTube Rack System™ 96-Plug Mats	G	BTN3346-96C
-	Natural	Yes	MicroTube Rack System™ 96-Plug Mats	G	BTN3346-96CS

<b>Packaging Description</b>	<b>A</b> = 960 Tubes/Bag, 5 Bags/Case	<b>E</b> = 12 Strips/Rack, 10 Racks/Pack, 5 Packs/Case
	<b>B</b> = 120 Strips/Bag, 5 Bags/Case	<b>F</b> = 8 Strips/Rack, 10 Racks/Pack, 5 Packs/Case
	<b>C</b> = 80 Strips/Bag, 5 Bags/Case	<b>G</b> = 10 Mats/Bag, 5 Bags/Case
	<b>D</b> = 96 Tubes/Rack, 10 Racks/Pack, 5 Packs/Case	<b>H</b> = 96 Tubes/Rack, 6 Racks/Pack, 5 Packs/Case

\* All volumes for Single Tubes and TubeStrips are 'working volumes' with CapStrips affixed



GoldenGate Bioscience offers an extensive range of Tubes, Strips and Multi-Well Plates for the PCR process. As with all GoldenGate plasticware, these PCR products are manufactured from virgin, medical grade polypropylene and certified free from RNase, DNase, DNA and pyrogens.

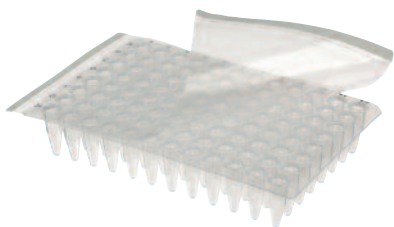


## TUBES

- ▶ 0.2ml, 0.5ml tubes fit virtually all popular thermal cyclers
- ▶ Crystal clear transparency throughout
- ▶ Tight fitting design on both cap styles eliminates concerns over sample evaporation or 'popping' while still being easy to open
- ▶ Autoclavable

## PLATES

- ▶ Available in 96 and 384 well formats with corner notches to facilitate orientation of plate
- ▶ Options for all popular cyclers including FAST and qPCR
- ▶ Highly visible pad-printed alpha-numeric sample identification

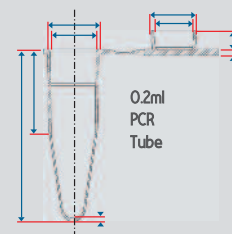


*better by design*

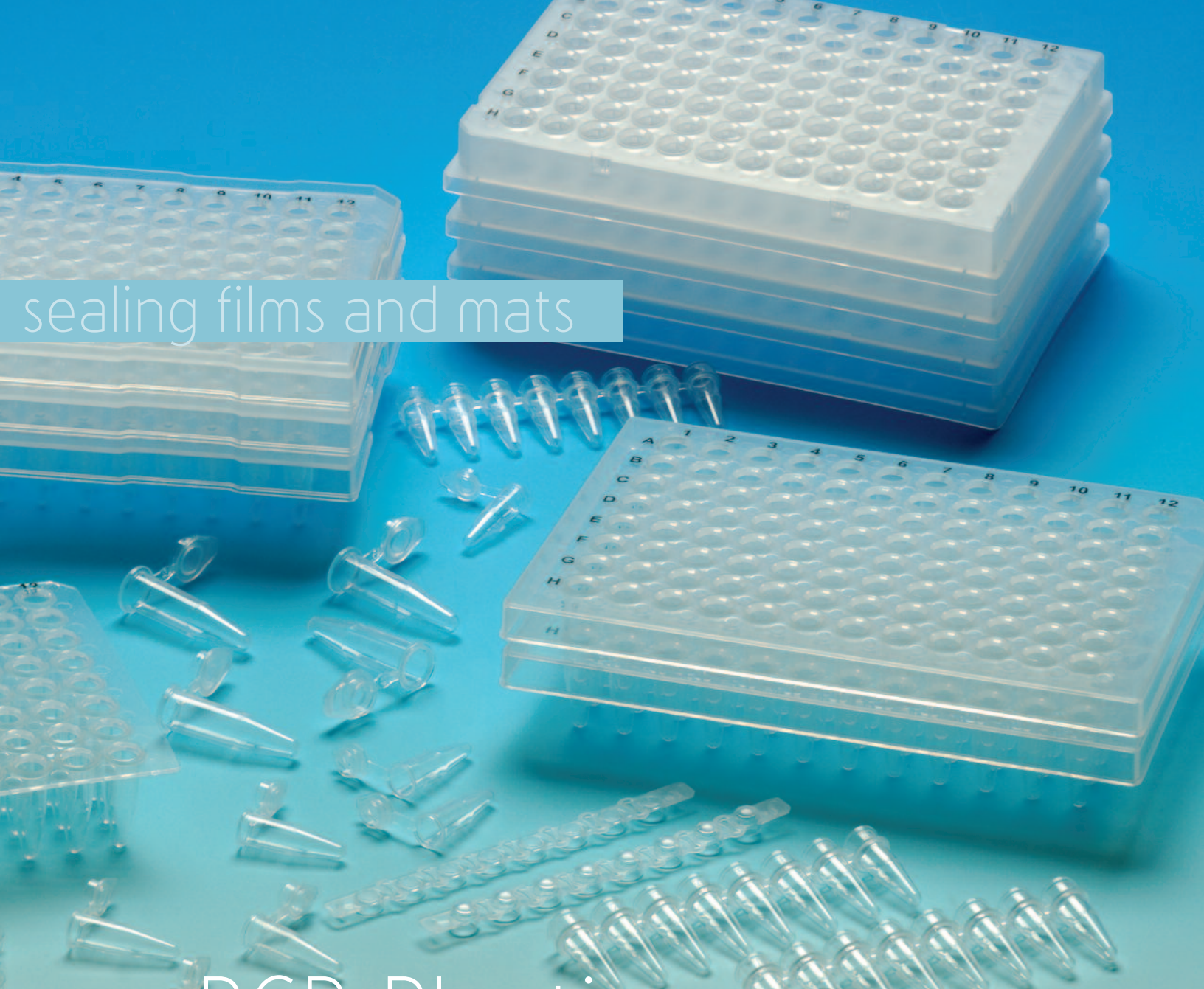
GoldenGate Bioscience offers three approaches to plate sealing during cycling; single-use films, re-useable silicone PlugMats™ and CapStrips™. Films, in either clear polypropylene or polyester, and aluminum foils provide exceptional sealing across the entire plate during transportation or storage. When used in conjunction with a silicone compression mat, well to well contamination and cross-over in PCR applications is virtually eliminated. Ultraclear film is available to provide the optimal clarity required for real-time applications. For multiple use, 96-well PlugMats™ effectively seal each well during the PCR process.



tubes







sealing films and mats

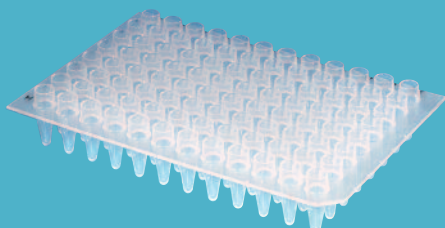
# PCR Plasticware

features ultra-thin and consistent wall thickness on all tubes and plate wells, to allow precise heat transfer from the thermal cycler block along the entire surface of the tube or well and so reduce cycle times.

For easy sample identification, all plates feature high contrast printed letters and numerals. Barcoding for sample management and storage/retrieval is available on semi-skirted and skirted plates, upon request. Contact your local sales representative. All GoldenGate Bioscience plasticware is certified free from DNA, DNase, RNase and pyrogens.

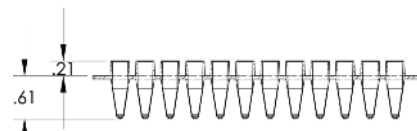
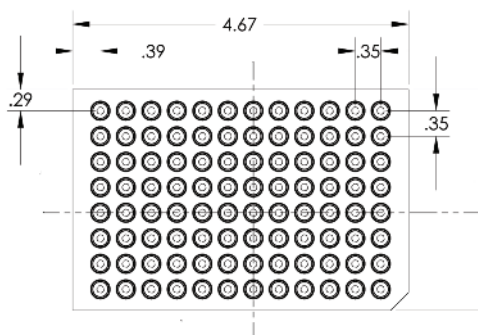
ULTRA-THIN

## 96-well, no skirt



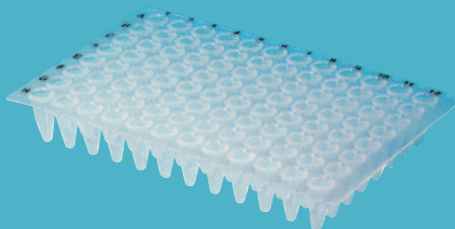
- Raised Wells
- Single notch corner at H12

Style	Color	Volume	Description	Packaging	Cat.No.
Standard	Clear	200µl	MicroFlex™ PCR 96 Well Plates, No-Skirt	10 Plates/Pack, 10 Packs/Case	BPCP096-NS-RW



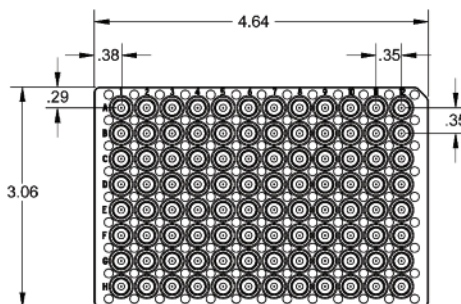
**Application:** Classic Thermal Cycling  
**Cycler:** ABI, Biorad, Eppendorf, Biometra, Ericom, Esco, G-Storm, MWG, Stratagene, Takara, Techne, Thermo/Hyaid  
**Sealing Film:** BPNSFFT-LPE  
**Compatibility:** BPCSFR-T-SPE; BPCSFR-T-MPE; BPCSFR-T-LPO; BPOSFCL-LAL; BPOSFRR-SAL; BPOSFFT-LAL

## 96-well, no skirt



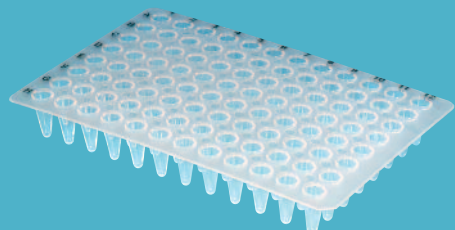
- Flat-top Plate
- Fits ABI PRISM® 310, 3100, 3700
- Single notch corner at A12

Standard	Clear	200µl	MicroFlex™ PCR 96 Well Plates, No-Skirt	10 Plates/Pack, 10 Packs/Case	BPCP096-NS-SP
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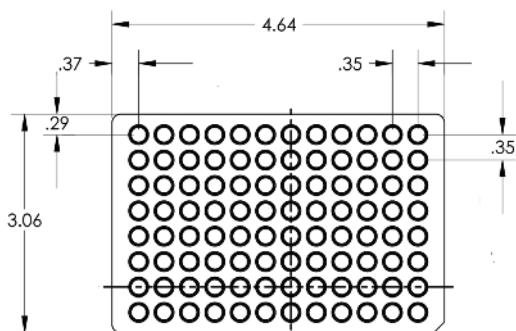
**Application:** Classic Thermal Cycling, Real-Time Cycling  
**Cycler:** ABI, MJ/Biorad, Eppendorf, Biometra, Ericom, Esco, G-Storm, MWG, Stratagene, Takara, Techne, Thermo/Hyaid  
**Sealing Film:** BPNSFRR-SPE  
**Compatibility:** BPCSFR-T-SPE; BPCSFR-T-LPO; BPOSFCL-LAL; BPOSFRR-SAL

## 96-well, no skirt



- Low Profile, Flat-top Plate
- Suitable for 0.1ml cycler blocks
- Single notch corner at H12

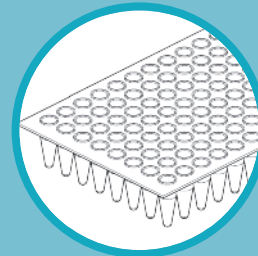
Low Profile	Clear	100µl	MicroFlex™ PCR 96 Well Plates, No-Skirt	20 Plates/Pack, 5 Packs/Case	BPCP096-NS-LP
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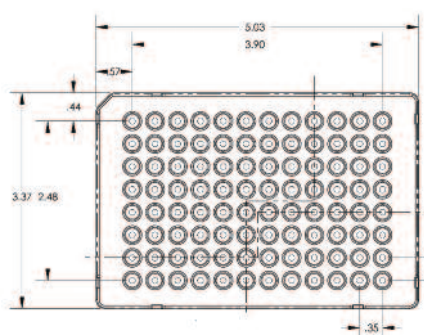
**Application:** Classic Thermal Cycling, Real-Time Cycling  
**Cycler:** MJ/Biorad, Eppendorf, Biometra, Ericom, G-Storm, MWG, Stratagene, Takara, Techne, Thermo/Hyaid  
**Sealing Film:** BPNSFRR-SPE  
**Compatibility:** BPCSFR-T-SPE; BPCSFR-T-LPO; BPOSFCL-LAL; BPOSFRR-SAL



# MicroFlex™ PCR Plasticware

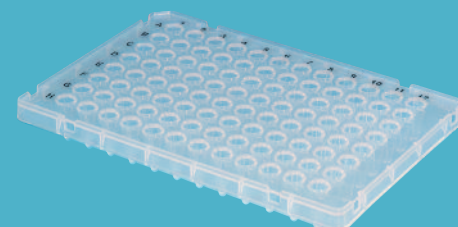


Style	Color	Volume	Description	Packaging	Cat.No.
Low Profile	Clear	100µl	MicroFlex™ PCR 96 Well Plates, Half-Skirt	10 Plates/Pack, 10 Packs/Case	BPCP096-HSR-LP



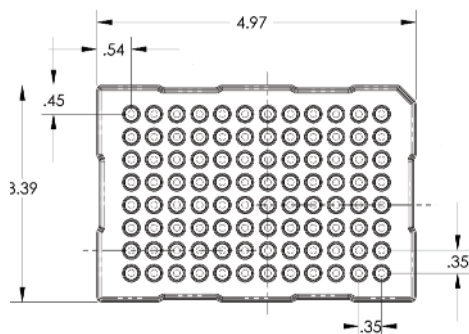
**Application:** Classic Thermal Cycling, Real-Time Cycling  
**Cycler:** Applied Biosystems FAST, Eppendorf  
**Compatibility**  
**Sealing Film:** BPNSFRR-SPE  
**Compatibility** BPCSFRT-SPE; BPCSFRT-LPO  
 BPOSFRR-SAL

## 96-well, half skirt



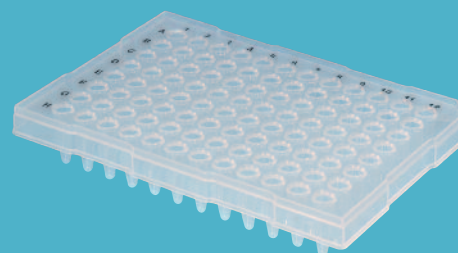
- Raised Rim around Plate
- Fits ABI FAST Cyclers
- Low volume wells (0.1ml)
- Single notch corner at A1

Standard	Clear	200µl	MicroFlex™ PCR 96 Well Plates, Half-Skirt	10 Plates/Pack, 10 Packs/Case	BPCP096-HSR-SP
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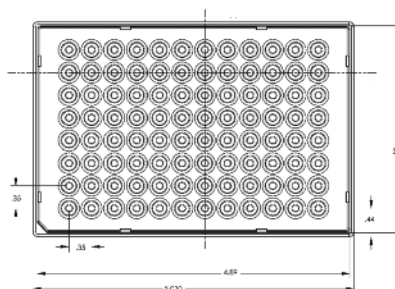
**Application:** Classic Thermal Cycling, Real-Time Cycling  
**Cycler:** Applied Biosystems. Bio-rad, Eppendorf, Ericom, G-Storm, MWG, Stratagene, Takara, Techne, Thermo/Hyaid  
**Compatibility**  
**Sealing Film:** BPNSFRR-SPE  
**Compatibility** BPCSFRT-SPE; BPCSFRT-LPO  
 BPOSFCR-LAL; BPOSFRR-SAL

## 96-well, half skirt



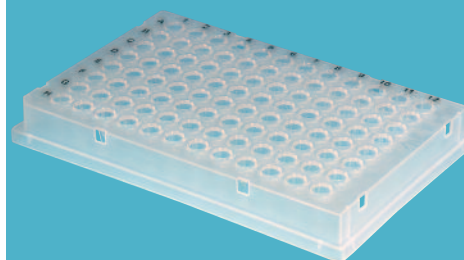
- Raised Rim around Plate
- Fits ABI Standard Cyclers and Sequencers
- Standard volume wells (0.2ml)
- Single notch corner at A12

Low Profile	Clear	100µl	MicroFlex™ PCR 96 Well Plates, Full-Skirt	10 Plates/Pack, 10 Packs/Case	BPCP096-FS-LP
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**Application:** Classic Thermal Cycling, Real-Time Cycling  
**Cycler:** MJ/Biorad, Eppendorf, Amersham/GE, Biometra, Esco, MWG, Stratagene, Takara, Techne, Thermo/Hyaid, Transgenomic  
**Compatibility**  
**Sealing Film:** BPNSFFT-LPE; BPNSFCR-LPP  
**Compatibility** BPCSFRT-SPE; BPCSFRT-LPO  
 BPOSFCR-LAL; BPOSFRR-SAL; BPOSFFT-LAL

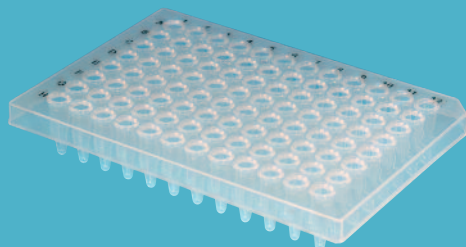
## 96-well, full skirt



- Automation-friendly
- Fits Amersham MegaBACE 500 and 1000
- Low volume wells (0.1ml)
- Single notch corner at H1

See more Half-Skirted Plates on page 28

## 96-well, half skirt



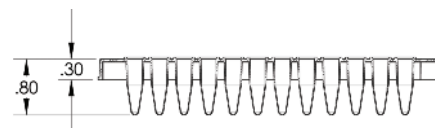
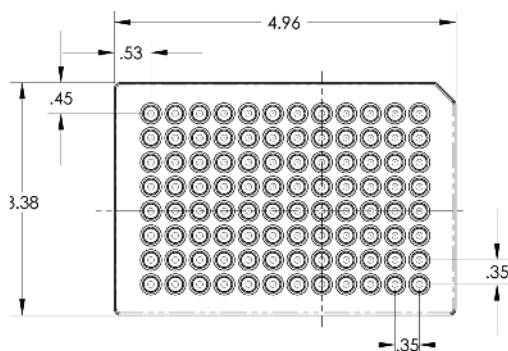
- Standard UniFit design
- Traditional profile, flat-top plate
- Fits virtually all thermal cyclers
- Single notch corner at A12

**Style**   **Color**   **Volume**   **Description**

**Packaging**

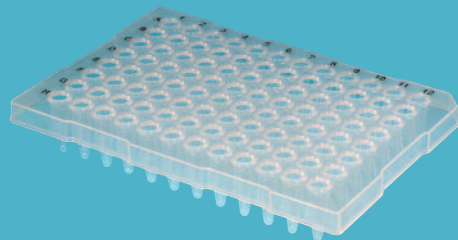
**Cat.No.**

Standard   Clear   200µl   MicroFlex™ PCR 96 Well Plates, Half Skirt   10 Plates/Pack, 10 Packs/Case   BPCP096-HS-SP



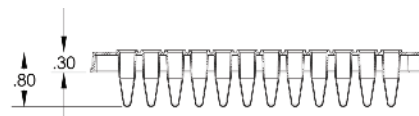
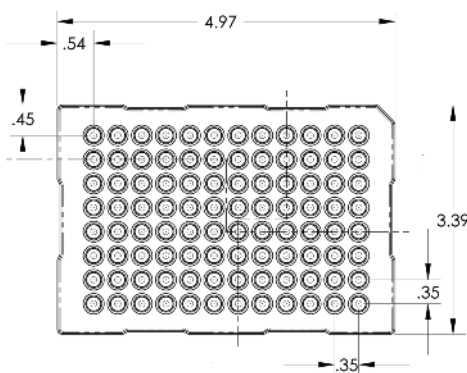
**Application:** Classic Thermal Cycling, Real-Time Cycling  
**Cycler:** ABI, MJ/Biorad, Eppendorf, Biometra, Corbett Research/ Qiagen, Ericom, Escio, G-Storm, MWG, Stratagene, Takara Techné, Thermo/Hybrid  
**Sealing Film:** BPNSFFT-LPE; BPNSFCR-LPP  
**Compatibility:** BPCSFRT-MPE; BPCSFRT-LPO  
 BPNSFCR-LAL; BPOSFRR-SAL; BPOSFFT-LAL

## 96-well, half skirt



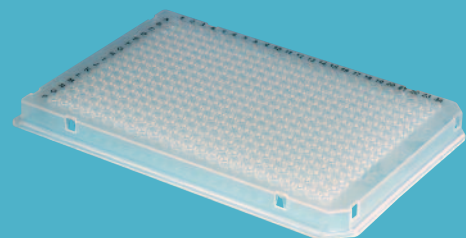
- Hybrid UniFit design
- Original ABI profile, flat-top plate
- Fits virtually all thermal cyclers
- Single notch corner at A12

Standard   Clear   200µl   MicroFlex™ PCR 96 Well Plates, Half-Skirt   10 Plates/Pack, 10 Packs/Case   BPCP096-HS-HY



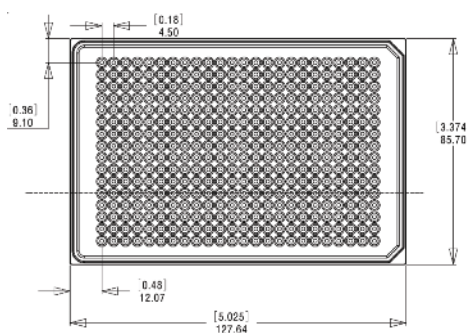
**Application:** Classic Thermal Cycling, Real-Time Cycling  
**Cycler:** ABI, MJ/Biorad, Eppendorf, Ericom, G-Storm, MWG, Stratagene, Takara, Techné, Thermo/Hybrid  
**Sealing Film:** BPNSFFT-LPE; BPNSFCR-LPP  
**Compatibility:** BPCSFRT-SPE; BPCSFRT-LPO  
 BPNSFCR-LAL; BPOSFRR-SAL; BPOSFFT-LAL

## 384-well, full skirt



- Automation-friendly
- Dual notch corners at A24 and P24

Standard   Clear   50µl   MicroFlex™ PCR 384 Well Plates, Full-Skirt   10 Plates/Pack, 10 Packs/Case   BPCP384-FS-2N

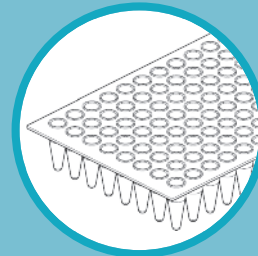


**Application:** Classic Thermal Cycling, Real-Time Cycling  
**Cycler:** ABI, MJ/Biorad, Eppendorf, Biometra, Corbett Research/ Qiagen, Escio, Flexi, MWG, Techné, Thermo/Hybrid  
**Sealing Film:** BPNSFFT-LPE  
**Compatibility:** BPCSFRT-SPE; BPCSFRT-LPO  
 BPNSFCR-LAL; BPOSFFT-LAL

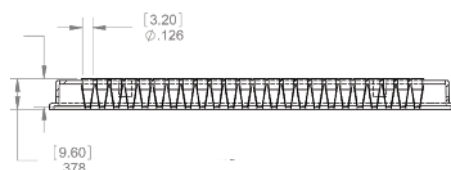
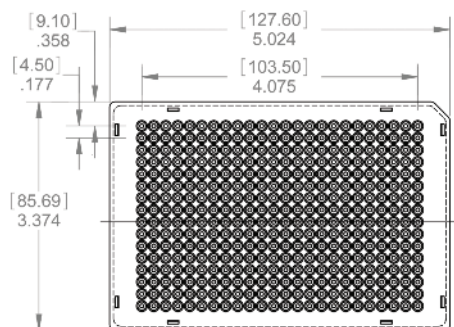
See more Half-Skirted Plates on page 27



# MicroFlex™ PCR Plasticware

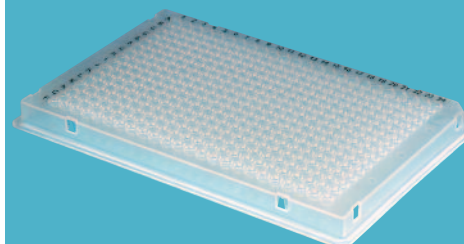


Style	Color	Volume	Description	Packaging	Cat.No.
Standard	Clear	50µl	MicroFlex™ PCR 384 Well Plates, Full-Skirt	10 Plates/Pack, 10 Packs/Case	BPCP384-FS-1N



**Application:** Classic Thermal Cycling, Real-Time Cycling  
**Cycler:** ABI, MJ/Biorad, Eppendorf, Amersham/GE, Biometra, Corbett Research/ Qiagen, Esco, MWG, Techné, Thermo/Hybrid  
**Sealing Film:** BPNSFFT-LPE  
**Compatibility:** BPCSFRT-SPE; BPCSFRT-LPO  
 BPOSFRT-LAL; BPOSFFT-LAL

## 384-well, full skirt



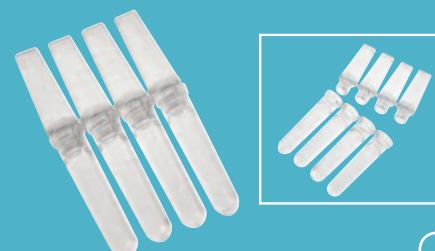
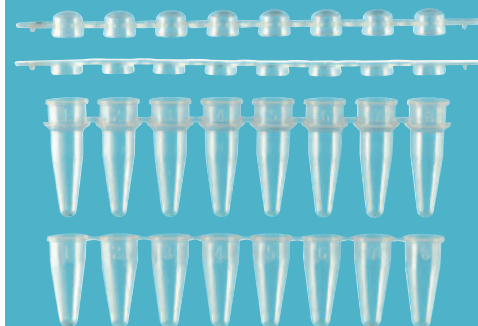
- Automation-friendly
- Single notch corner at A24

Volume	Color	Cap Style	Description	Packaging	Cat.No.
0.2ml	Clear	Domed	MicroFlex™ PCR Single Tubes with attached Frosted Domed Caps	1000/Pack, 10 Packs/Case	BPCST02-DC-01B
0.2ml	Clear	Flat	MicroFlex™ PCR Single Tubes with attached Frosted Flat Caps	1000/Pack, 10 Packs/Case	BPCST02-FF-01B
0.2ml	Clear	Flat	MicroFlex™ PCR Single Tubes with Optically Clear Flat Caps for Real-Time PCR	1000/Pack, 10 Packs/Case	BPCST02-RT-01B
0.5ml	Clear	Domed	MicroFlex™ PCR Single Tubes with attached Frosted Domed Caps	1000/Pack, 10 Packs/Case	BPCST05-DC-01B
0.5ml	Clear	Flat	MicroFlex™ PCR Single Tubes with attached Frosted Flat Caps	1000/Pack, 10 Packs/Case	BPCST05-FF-01B

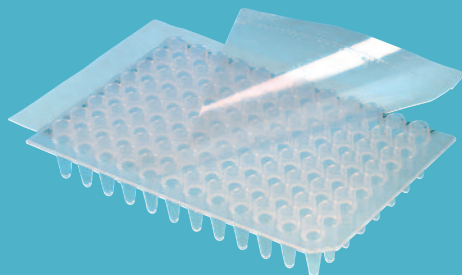


## PCR Strips

-	Clear	Domed	MicroFlex™ PCR 8-CapStrips™, Domed	125 Strips/Pack, 10 Packs/Case	BPCCS00-DC-08C
-	Clear	Flat	MicroFlex™ PCR 8-CapStrips™, Flat Optically Clear for Real-Time PCR	125 Strips/Pack, 10 Packs/Case	BPCCS00-RT-08C
0.2ml	Clear	-	MicroFlex™ PCR 8-TubeStrips™	125 Strips/Pack, 10 Packs/Case	BPCTS02-SP-08B
0.1ml	Clear	-	MicroFlex™ PCR 8-TubeStrips™, Low Profile	125 Strips/Pack, 10 Packs/Case	BPCTS01-LP-08B
0.2ml	Clear	Domed	MicroFlex™ PCR 8-TubeStrips™ and Domed CapStrips™	125 Strips each/Pk, 10 Pks/Case	BPCTS02-DC-08A
0.2ml	Clear	Flat	MicroFlex™ PCR 8-TubeStrips™ and Optically Clear Flat CapStrips™	125 Strips each/Pk, 10 Pks/Case	BPCTS02-RT-08A
0.1ml	Clear	-	0.1 ml Strip Tubes and Caps for Qiagen/Corbett Research Rotor-Gene Q	250 strips/pack, 10x packs	RGCS-1250



## Transparent



### Non-optical PCR

- Suitable for Classic PCR use, as well as for long term storage
- Seals 96- and 384-well PCR plates
- Exceptional seal across entire plate
- When used with a silicone compression mat, risk of evaporation, well to well contamination and cross-over in PCR applications is eliminated
- Tough polypropylene or polyester (not suitable for piercing with pipette tip)

### Real-Time PCR

- Ultra-clear for optical analysis during Real-Time PCR
- All films have exceptionally strong adhesive characteristics to minimize evaporation and cross-contamination risks
- Polyolefin film, BPCSFRT-LPO, features strong silicone-based adhesive activated with pressure, no tacky residues that can interfere with optical analysis

## Aluminum



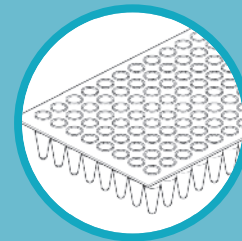
- Provides exceptional seal on multi-well plates under the widest temperature conditions
- When used with a silicone compression mat, risk of evaporation, well to well contamination and cross-over in PCR applications is eliminated
- Ideal for light sensitive samples, uniformly applied adhesive provides optimum well sealing
- Pierceable with single / multichannel pipettors and robotic probes
- Suitable for classic PCR, and for long-term storage

Material	Color	Thickness	Description	Packaging	Cat. No.
<b>Non-Optical PCR/Storage</b>					
Polyester	Clear	50µm	MicroFlex™ Classic PCR Plate Sealing Film, Dimensions: 125 x 80mm, not including end tabs <ul style="list-style-type: none"> <li>• Larger cut, designed for flat-top plates</li> <li>• Longer full width end-tabs for easier handling</li> </ul>	Pack/100 sheets	BPNSFFT-LPE
Polyester	Clear	50µm	MicroFlex™ Classic PCR plate sealing film, Dimensions: 118 x 78mm, not including end tabs <ul style="list-style-type: none"> <li>• Smaller cut, designed for raised rim plates</li> <li>• Longer end-tabs for easier handling</li> </ul>	Pack/100 sheets	BPNSFRR-SPE
Polypropylene	Clear	50µm	MicroFlex™ Classic PCR plate sealing film, Dimensions: 123 x 80mm, not including end tabs <ul style="list-style-type: none"> <li>• Optimal chemical resistance, minimal residue on removal</li> <li>• Larger cut, original film</li> </ul> Recommended Temperature Range: -40°C to +120°C	Pack/100 sheets	BPNSFCR-LPP
<b>Real-Time PCR</b>					
Polyolefin	UltraClear	50µm	MicroFlex™ Real-Time PCR Plate Sealing Film, Dimensions: 113 x 79mm, not including end tabs <ul style="list-style-type: none"> <li>• Universal cut, for raised rim and flat-top plates</li> <li>• Strong silicone-based adhesive, pressure activated</li> <li>• Heat resistant, recommended for temperatures from -70°C to +100°C</li> <li>• Low autofluorescence, also suited for protein crystallization</li> <li>• Recommended for flexible plates, particularly no-skirt or half-skirt plates; and/or where evaporation is an issue</li> </ul>	Pack/100 sheets	BPCSFRT-LPO
Polyester	UltraClear	50µm	MicroFlex™ Real-Time PCR Plate Sealing Film, Dimensions: 122 x 79mm, not including end tabs <ul style="list-style-type: none"> <li>• Ultra-clear, larger cut, designed for flat-top PCR plates</li> <li>• Strong acrylic adhesive, two full width end tabs</li> </ul>	Pack/100 sheets	BPCSFRT-MPE
Polyester	UltraClear	50µm	MicroFlex™ Real-Time PCR Plate Sealing Film, Dimensions: 118 x 78mm, not including end tabs <ul style="list-style-type: none"> <li>• Ultra-clear, smaller cut, designed for raised rim plates</li> <li>• Strong acrylic adhesive, two partial width end tabs</li> </ul> Recommended Temperature Range: -40°C to +120°C (applies to Real-Time Polyester films only)	Pack/100 sheets	BPCSFRT-SPE

## Non-Optical PCR/Storage

Aluminum	Opaque	38µm	MicroFlex™ Aluminum PCR Plate Sealing Foil, Dimensions: 124 x 82.5mm, not including end tab <ul style="list-style-type: none"> <li>• Suitable for 96 and 384-well flat top plates</li> <li>• Full width single end tab, no perforations</li> </ul>	Pack/100 sheets	BPOSFFT-LAL
Aluminum	Opaque	38µm	MicroFlex™ Aluminum PCR Plate Sealing Foil, Dimensions: 118 x 78mm, not including end tab <ul style="list-style-type: none"> <li>• Smaller cut, designed for 96-well raised rim plates</li> <li>• Partial width single end tab, no perforations</li> </ul>	Pack/100 sheets	BPOSFRR-SAL
Aluminum	Opaque	36µm	MicroFlex™ Aluminum PCR Plate Sealing Foil, Dimensions: 125.4 x 82.5mm, not including end tabs <ul style="list-style-type: none"> <li>• Chemically resistant film (DMSO, acetonitrile, ethanol)</li> <li>• Suitable for 96 and 384-well flat top plates</li> <li>• Two full width end tabs, with perforations</li> </ul> Recommended Temperature Range: -80°C to +120°C	Pack/100 sheets	BPOSFCR-LAL

# MicroFlex™ Plate Sealing

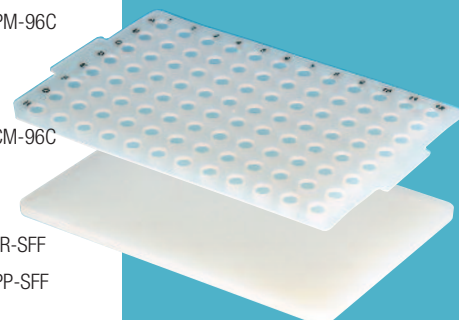


Material	Color	Description	Packaging	Cat. No.
Silicone	Translucent	MicroFlex™ 96-Well PCR Plate PlugMat™ • 96-well PlugMat effectively seals each well eliminating evaporation, well-to-well and cross-over contamination in PCR applications • Pierceable	10 Mats/Pack, 5 Packs/Case	BPWPPM-96C
Silicone	Translucent	MicroFlex™ Plain Compression Mat • Plain compression mat eliminates evaporation, well to well evaporation, well-to-well and cross-over contamination when used to secure sealing films and foils in a thermal cycler	10 Mats/Pack, 5 Packs/Case	BPWFCM-96C
-	-	10cm Soft Rubber Roller	Each	BPNSRR-SFF
-	-	9.5cm Soft Plastic Paddle	5 per Pack, 10 Packs/Case	BPWSPP-SFF



- For pressing film to plate for a secure seal
- Roller recommended for flat-top plates
- Paddles work within edges of raised rim plates

## Silicone Mats



## Plate Sealing Recommendations

96 no skirt BPCP096-NS-RW Std profile	96 no skirt BPCP096-NS-SP Std profile	96 no skirt BPCP096-NS-LP Low profile	96 half skirt BPCP096-HSR-LP Low profile	96 half skirt BPCP096-HSR-SP Std profile	96 full skirt BPCP096-FS-LP Low profile	96 half skirt BPCP096-HS-SP Std profile	96 half skirt BPCP096-HS-HY Std profile	384 full skirt BPCP384-FS-2N Std profile	384 full skirt BPCP384-FS-1N Std profile
✓†	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓*	✓*	✓*	✓	✓
✓†	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓†	✓	✓	✓	✓	✓*	✓*	✓*	✓	✓
✓†	✓	✓	✓	✓	✓	✓	✓	✓	✓

\* Will fit covering wells, but not if lined up to leading edge of plate.

† For all films applied to this plate, we recommend that they are applied using a paddle or plate roller. To minimize evaporation, a Compression Mat should be used during Classic thermal cycling, but not during Real Time thermal cycling.

### Technical Note:

GoldenGate Bioscience uses a proprietary 'gold standard' resin which, unlike resins used by most other injection molders, is free of "animal-derivatives" such as tallow and other clarifying agents. In addition, this 'gold-standard' polypropylene resin offers superior clarity, flexibility, strength, and resistance to gamma irradiation over other competitor's polypropylene resins.

Many resin manufacturers add tallow to their raw material as a lubricant to facilitate the injection molding process. The concern for researchers is that this agent, from rendered animal fat (almost exclusively bovine), could conceivably be contaminated with BSE/TSE (bovine spongiform encephalopathy / transmissible spongiform encephalopathy). If such animal derivatives are used, then certain sterilization procedures must be followed in order to remove the risk of BSE/TSE. Clearly this extra process is not desirable.

**GoldenGate Bioscience resin is classified as USP Class 6 for FDA-approved medical and food-grade products. Any products made with colorants or other additives are guaranteed to be heavy metals-free, thereby meeting EU Directive 2002/95/EC Restriction on Hazardous Substances (RoHS).**

### tal-low


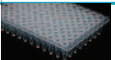
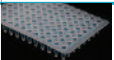
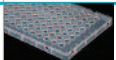
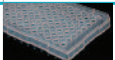
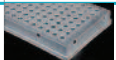
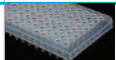
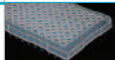

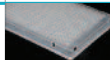
/ˈtaloʊ/

*Noun*

A hard fatty substance made from rendered animal fat, used in making candles and soap.

### bse/tse

*Abbreviation for mad cow disease*  
bovine spongiform encephalopathy/ transmissible spongiform encephalopathy, a usually fatal disease of cattle affecting the central nervous system, causing agitation and staggering.

96 no skirt BPCP096-NS-HW Std profile	96 no skirt BPCP096-NS-SP Std profile	96 no skirt BPCP096-NS-LP Low profile	96 half skirt BPCP096-HSR-LP Low profile	96 half skirt BPCP096-HSR-SP Std profile	96 full skirt BPCP096-FS-LP Low profile	96 half skirt BPCP096-HS-SP Std profile	96 half skirt BPCP096-HS-HY Std profile	384 full skirt BPCP384-FS-2N	384 full skirt BPCP384-FS-1N
									

#### Applied Biosystems / Life Technologies

2700	✓	✓			✓		✓	✓	✓
2720					✓				
6100					✓				
9600	✓	✓			✓		✓		
9700	✓	✓			✓		✓	✓	✓
9800 Fast				✓					
Veriti 0.1ml				✓					
Veriti 0.2ml					✓		✓		
Veriti 384									✓
REAL TIME..... 5700		✓			✓		✓		
REAL TIME..... 7000		✓			✓		✓		
REAL TIME..... 7300		✓			✓		✓		
REAL TIME..... 7500		✓			✓		✓		
REAL TIME..... 7500 Fast				✓					
REAL TIME..... 7700		✓			✓		✓		
REAL TIME..... 7900HT		✓			✓		✓		
REAL TIME..... 7900HT Fast				✓					
REAL TIME..... 7900HT 384									✓
REAL TIME..... StepOne Plus				✓					
REAL TIME..... ViiA 7				✓	✓				✓
REAL TIME..... QuantStudio 12K Flex				✓	✓				✓
SEQUENCER..... 310	✓	✓		✓	✓		✓	✓	
SEQUENCER..... 3100 / 3130xl	✓	✓		✓	✓		✓		✓
SEQUENCER..... 3500 / 3500xl				✓	✓				✓
SEQUENCER..... 3700 / 3730xl	✓	✓		✓	✓		✓	✓	✓

#### MJ Research / Bio-Rad

Gene Cyclor	✓	✓			✓		✓		
PTC-100	✓	✓	✓			✓		✓	✓
PTC-200	✓	✓	✓			✓		✓	✓
PTC-225 Tetrad	✓	✓	✓			✓		✓	✓
Dyad / Dyad Disciple	✓	✓	✓			✓		✓	✓
iCycler	✓	✓				✓			
MyCycler	✓	✓					✓		
Mini Gradient		✓	✓						
Personal		✓					✓		
T100		✓				✓			
DNA Engine		✓	✓			✓			✓
C1000 / S1000		✓	✓			✓			✓
REAL TIME..... Opticon / Opticon2		✓	✓			✓			
REAL TIME..... Chromo-4			✓			✓			
REAL TIME..... iCycler	✓	✓				✓		✓	✓
REAL TIME..... MyiQ	✓	✓				✓			
REAL TIME..... iQ5	✓	✓				✓			
REAL TIME..... CFX Connect			✓			✓			
REAL TIME..... CFX96						✓			
REAL TIME..... CFX384									✓
SEQUENCER..... BaseStation						✓			

#### Eppendorf

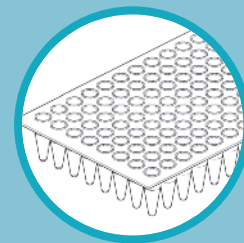
MasterCycler	✓	✓	✓			✓	✓		
MasterCycler ep Gradient	✓	✓			✓	✓	✓		
MasterCycler M384								✓	✓
MasterCycler Nexus		✓	✓			✓	✓		
MasterCycler Nexus Gradient		✓	✓			✓	✓		
MasterCycler Nexus Eco		✓	✓			✓	✓		
MasterCycler Pro		✓				✓	✓		✓
REAL TIME.... MasterCycler ep RealPlex	✓	✓		✓		✓	✓		

#### Amersham / GE Healthcare

SEQUENCER..... MegaBace 500						✓			
SEQUENCER..... MegaBace 1000									
SEQUENCER..... MegaBace 4000									✓



# MicroFlex™ PCR Plate Compatibility



96 no skirt BPCP096-NS-FW Std profile	96 no skirt BPCP096-NS-SP Std profile	96 no skirt BPCP096-NS-LP Low profile	96 half skirt BPCP096-HSR-LP Low profile	96 half skirt BPCP096-HSR-SP Std profile	96 full skirt BPCP096-FS-LP Low profile	96 half skirt BPCP096-HS-SP Std profile	96 half skirt BPCP096-HS-HY Std profile	384 full skirt BPCP384-FS-2N	384 full skirt BPCP384-FS-1N
✓	✓	✓			✓	✓	✓		
✓	✓	✓				✓	✓	✓	✓
✓	✓	✓			✓	✓	✓	✓	✓
✓	✓	✓			✓	✓	✓	✓	✓
	✓	✓			✓				✓
	✓	✓			✓				✓
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✓	✓	✓				✓			

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✓	✓				✓	✓			

								✓	
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✓	✓	✓		✓		✓	✓		
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					✓				
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## Biometra

Uno
Uno II
T1 Thermal Cycler
T-gradient
T-robot
T-3000
T-Professional
T-optical ..... REAL TIME

## Corbett Research / Qiagen

PalmCycler 96
PalmCycler 384

## Ericom

PowerBlock I
DeltaCycler I
DeltaCycler II
SingleBlock
TwinBlock

## Esco

Swift
Gene
Genius

## Flexi

Gene
------

## G-Storm

GS1 / GS2 / GS4
GSX / GSXs

## MWG

Primus 96
Primus 384

## Stratagene / Agilent Technologies

RoboCycler 96
RoboCycler Gradient
SureCycler 8800
MX3000 / MX4000

## Takara

TP240
TP3000

## Techno

TouchGene
CycloGene
Genius
Genius Quad
Genius (TC412)
FlexiGene
TouchGene X
TouchGene Gradient (TC512)
Quantica ..... REAL TIME

## Thermo Hybaid

PCR Sprint
MBS Satellite System
Px2 / PxE
PCR Express
Omni-E
TouchDown
OmniGene

## Transgenomic

WAVE System ..... SEQUENCER
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The real-life environment of a university molecular biology lab was selected for product comparison tests, using samples and reagents in every-day use in life science research applications. Most pipette manufacturers recommend pre-rinsing of tips 3-5 times to wet the inner wall prior to pipetting. In addition, many researchers in practice use the same tip not only once, but several times.

Our test method therefore took account of these facts and our tips' performance was evaluated after several aspirations and dispense cycles. This method clearly demonstrated significant and measurable differences between brands, as the number of pipettings increased. We consider this to more realistic in actual user practices.

- many manufacturers claim low retention for their tips, but the low retention performance in a variety of applications is highly variable from one brand to another
- GoldenGate Bioscience LFR™ Low Fluid Retention demonstrates the superior tip performance over the other brands tested, in the widest range of pipetting applications



**Evaluation of Low Fluid Retention Tips compared to competitors Regular and Low Retention Tips**

	Typical Reg. Tip	Comp. A	Low Retention Comp. B	Comp. C	GGB-LFR™
Food color (w/PP Glycol)	<b>X</b> Thick film from top to bottom	✓ Tiny residue at bottom	<b>X</b> Many drops from top to bottom	✓ Tiny residue at bottom	✓ Tiny residue at bottom
Protein BSA 100mg/ml	▲ Thin film residue	✓ Clean, almost clean	✓ Clean, almost clean	✓ Clean, almost clean	✓ Clean, almost clean
DNA 1µg/µl	<b>X</b> Large drops	✓ Clean	▲ Thin film residue	✓ Clean	✓ Clean
DNA Marker 1µg/µl	<b>X</b> Thick residue	✓ Almost clean	▲ Many small drops	✓ Almost clean	✓ Almost clean
LB (culture media)	▲ Residue stick	▲ Residue stick	<b>X</b> Residue stick heavily	▲ Residue stick, better	✓ Residue stick, much better
Saturated Ammonium Sulphate	▲ Thin residue stick	✓ Clean	✓ Clean	✓ Clean	✓ Clean
TAE (Tris-acetate-EDTA)	▲ Thin film stick	✓ Clean	▲ Residue stick	✓ Clean	✓ Clean
Ethidium Bromide 10mg/ml in H <sub>2</sub> O	▲ Residue stick	✓ Very thin film stick	✓ Very thin film stick	✓ Very thin film stick	✓ Very thin film stick
✓ = good ▲ = not good <b>X</b> = unacceptable	0 5 3	7 1 0	3 3 2	7 1 0	<b>8</b> <b>0</b> <b>0</b>

GoldenGate Bioscience LFR™ Low Fluid Retention technology is available in UniFit™ Pipette Tips, AeroGard™ Barrier Tips, and ClickSeal™ MicroCentrifuge Tubes. This advantage is perfect for researchers who require:

- the highest level of low-retention to improve pipetting accuracy and precision
- to minimize loss of precious samples and expensive reagents

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# Properties of Polypropylene

*better by design*

## Physical

Plastics Used  
Optical Properties  
Physical Properties

Autoclavable  
Temperature Range

Polypropylene  
Clear to opaque  
Rigid, high tensile strength, resistant to stress fracture, flexible in thin sections  
Yes  
-196°C to +135°C

## Chemical

	Rating*	
	20°C	60°C
<b>Acids</b>		
Benzoic acid	G	G
Boric acid	E	E
Hydrobromic acid 25 %	G	A
Citric acid	E	E
Hydrocyanic acid	G	G
Hydrofluoric acid	G	G
Phosphoric acid 25 %	E	E
Phosphoric acid 85 %	E	E
Phthalic acid	E	E
Tannic acid	E	E
Chromic acid	E	G
Maleic acid	E	E
Oleic acid	G	A
Oxalic acid	E	E
Nitric acid 5 %	G	A
Nitric acid 65 %	U	U
Chlorhydric acid 10 %	E	E
Chlorhydric acid 37 %	G	A
Butyric acid	E	E
Sulphuric acid 10 %	E	E
Sulphuric acid 78 %	G	U
Sulphuric acid 93 %	A	U
Tartaric acid	E	E
Acetic acid 50 %	E	E
Acetic acid 100 %	G	A
Trifluoroacetic acid (TFA) 20%	A	U
Perchloric acid	E	G
<b>Bases</b>		
Aqua ammonia	E	E
Calcium hydroxide	E	E
Potassium hydroxide	E	E
Caustic soda	E	E
Acid salt	E	E

	Rating*	
	20°C	60°C
Basic salt	E	E
Neutral salt	E	E
Potassium bicarbonate	E	G
Potassium permanganate	E	G
Sodium cyanide	E	E
Sodium ferricyanide	E	G
Sodium hypochlorite	G	A
<b>Organic Solvents</b>		
Acetone	A	U
Acetaldehyde	G	A
Aniline	E	E
Benzol	A	U
Petrol	U	U
Butyl alcohol	E	E
Dimethyl sulfoxide (DMSO)	E	E
Ethyl acetate	G	U
Ethyl alcohol	E	E
Ethyl dichloride	A	U
Ethyl ether	U	U
Phenol	G	G
Formalin 37%	E	G
Heptanes	A	U
Chlorobenzene	A	U
Chloroform	U	U
Carbon disulphide	U	U
Carbon tetrachloride	U	U
Kerosene	G	A
Methyl alcohol	E	E
Methylene (di)chloride	U	U
Methyl ethyl ketone	A	U
Nitrobenzene	A	U
Toluene	A	U
Trichlorethylene	U	U

This information page about polypropylene plastic resin is constructed from data from multiple sources. It is intended as a guide only in relation to GoldenGate Bioscience laboratory products. No guarantee or warranty is suggested or implied in respect to any of the information on this page, nor is any liability accepted under any circumstances.

## Sterilization

All of GoldenGate Bioscience's polypropylene lab products, including Filter Tips, may be sterilized in an autoclave. While a shorter steam exposure cycle is often preferable, the typical autoclave cycle for plastic consumable products is 121°C/250°F, for 15 minutes, at 15psi/1atm. After steam exposure is complete, use only an air drying cycle. Do not use a heated drying cycle, as this may cause deformation or weakening of any plastic products.

GoldenGate also offers many products that have been pre-sterilized by gamma irradiation. All of these sterile products are packaged in hermetically-sealed (vacuum-packed) nylon pouches to totally protect the contents from contamination until they are opened and ready for use. It is therefore guaranteed that GoldenGate products will remain sterile for at least 3 years. Visual display of their sterility is indicated by small round color-changing labels placed on all inner cartons and on outer shipping cases. The sterilization information can be cross-referenced by the four digit number on the Lot Number labels which are placed on every carton and case.

### Rating:

- E** Excellent (no attack)
- G** Good (no significant attack)
- A** Acceptable (light attack, limited use)
- U** Unacceptable (significant attack)

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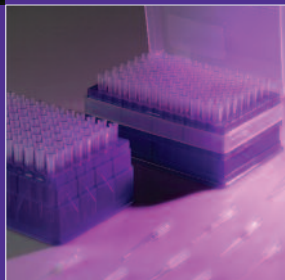
Gilson, Pipetman, Finnpiptette, Biohit, ProLine, m-Line, e-Line, Picus, Eppendorf, Reference, Research, Xplorer, Matrix, Impact2, Socorex, Acura, Nichiryo, Nichipet, Benchmate, VWR, Signature, VistaLab, Ovation Bionatural, Biometra, Biorad, Capelin, Rainin, Brand, Transferpette, Capp, Aero, Focus, Fisherbrand, Labnet, HTL, Axygen, Discovery, Labmate, AxyPet, Applied Biosystems Inc, Ericom, Esco, Swift, Gene, Flexi, G-Storm, MWG, Takara, Primus, Ventri, Prism, Fast, StepOne, ViiA, QuantStudio, MegaBace, Uno, T-gradient, T-robot, T-professional, T-optical, GeneCycler, PTC, Dyad, DNA Engine, iCycler, MyCycler, Opticon, Chrome4, MyIQ, iQ5, CFX Connect, BaseStation, PalmCycler, Corbett Research, Qiagen, Mastercycler, MasterCycler Nexus, RealPlex, PowerBlock, DeltaCycler, Genius, GS1, GS4, GSX, GSXs, Stratagene, Agilent Technologies, Robocycler, SureCycler, Flexigene, Techno, Touchgene, CycloGene, Genius, Quantica, Thermo Hybaid, PCR Sprint, PCR Express, MBS Satellite, Omni-E, Px2, PxZ, Touchdown, Omnimixer, Wave, Tecan, Beckman are trademarks or registered trademarks of their respective manufacturers, distributors or agents. PCR is a patented process of Roche Holdings.

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