BIOplastics BV

Europe based BIOplastics BV is a leading innovative high quality injection molding manufacturer of plastic consumables serving the molecular biology market and in particular the (q)PCR marketplace. A member of the privately owned BIOzym Holding group, which is comprised of CYCLERtest BV, GENOtronics BV, BIOzymTC BV, BPCTi Inc., Hendrikx Inc. and CelsiusLabs.

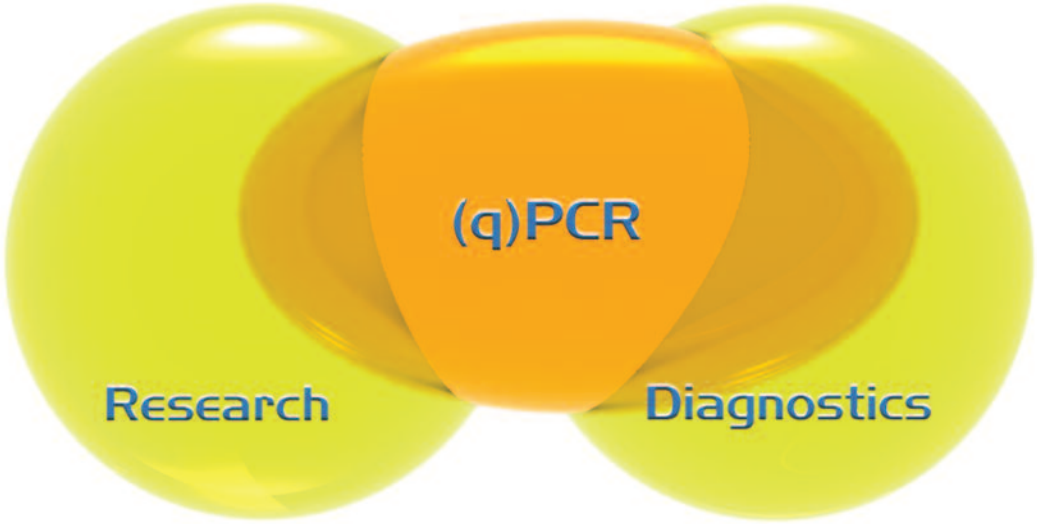
BIOplastics offers the widest and most superior range (q)PCR plastics globally. BIOplastics pursues the vision to design and manufacture plastic consumables and labware from the end users perspective to ensure a superior quality, highly reproducible disposable plastic that allows ease of use and maximum reproducibility of results. BIOplastics products are offered through a worldwide network of selected distributors and resellers, who focus on personal long-term relationships with high levels of service and support to serve you best.

BIOplastics BV Strategic views

Unlike other suppliers of laboratory consumables we not only supply but also manufacture the widest range (q)PCR disposables. Since we are independent of any cycler manufacturer we focus on serving the application targeted market place of (q)PCR and directly related technologies regardless of the equipment you use. BIOplastics BV is therefore manufacturing Extreme Uniform plastics to enable accurate and reproducible (q)PCR results. By doing so, BIOplastics is able to replace one uncontrolled variable in (q)PCR by a controlled and well defined one.

All BIOplastics developments support the fast changing PCR and qPCR Diagnostic Market Place.
BIOplastics is dedicated to remain the leader in this process.

Michael T. Hendrikx CEO



Ordering information

Local Distributor

BIOplastics BV has distributors in many countries worldwide. Your local distributor is:

Netherlands, Belgium & Luxembourg

BIOzymTC BV
Rotscherweg 61
Entrance C
6374 XW Landgraaf
The Netherlands

Phone: +31(0)45 533 8777
Fax: +31(0)45 533 8790

Email: info@biozymtc.com (general)
order@biozymtc.com (orders)

Internet: www.biozymtc.com

Webshop

www.bioplastics.com

Interactive
product to instrument/pipette search at
www.bioplastics.com

In case no local distribution is available, you can order BIOplastics products or request samples directly at the following number and/or address:

Head Quarters & Manufacturing
BIOplastics BV
Rötscherweg 61
Entrance D
6374 XW Landgraaf
The Netherlands

Phone: +31 (0)45 533 8750
Fax: +31 (0)45 533 8796

E Mail: info@bioplastics.com
order@bioplastics.com
www.bioplastics.com

Sudsidiary Sales Office USA
BPCTi Inc.
2933 S.Miami Blvd. Ste 121
Durham NC 27703,
USA

Phone: (919) 806 8811
Fax: (919) 806 2014

E Mail: info@bpcti.com
order@bpcti.com or/and
order@bioplastics.com
www.bpcti.com

Sudsidiary Sales Office China
Hendrikx Inc. BPCTi Inc.
Shanghai Central Office, China

Jin Sha Jiang Road
Room 803, 8/F, No.5, Lane
1628#,
200333, Shanghai

Phone: +86+ 21 3251 3173
Fax: +86+ 21 3251 3651

E Mail: info@bpcti.com.cn
order@bpcti.com.cn
www.bpcti.com.cn

Sudsidiary Sales Office China
Hendrikx Inc. BPCTi Inc.
Beijing Office, China

No, 1 Guang Qu Meng Wai Da Jie
Fu Li Cheng A,Bld.1,R.802,
Chao Yang D.
100022, Beijing

Phone: +86 10 5876 4977
Fax: +86 10 5876 4977

E Mail: info@bpcti.com.cn
order@bpcti.com.cn
www.bpcti.com.cn

Please have the following information available when ordering:

1. Shipping & Invoice address
2. Contact person
3. Telephone number
4. Purchase order number
5. Catalogue number and description of product(s)
6. Quantity and size of the product(s)
7. VAT number / TAX ID

Liability & Warranty

Data supplied with products are correct and reliable to the best of our knowledge and belief. Under no circumstances will BIOplastics BV be liable for the consequential damage arising from the use of its products. BIOplastics BV is liable exclusively and restrictively to replace defective products. BIOplastics BV warrants its products to be free of defects in material and workmanship. BIOplastics BV will replace any products that are found to be defective, at no cost.

Drawings of tips and tubes are at actual size and proportion, unless otherwise indicated.

General Information page 5

(Registered)Trade marks see inside back cover page

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6. Laser Mark ID and Coded Products page 110

Features, advantages, benefits

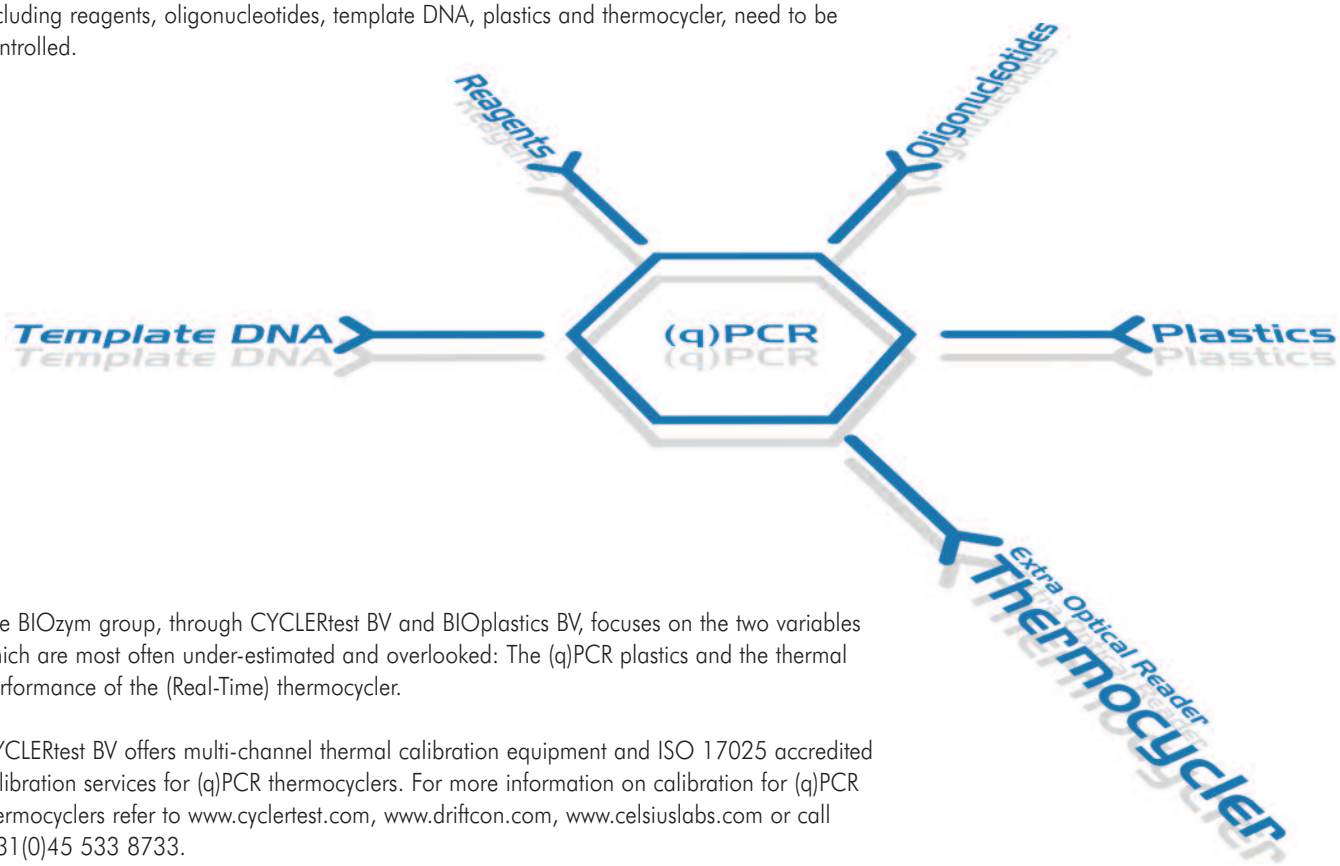
The main advantage of BIOplastics Extreme Uniform plastics is the controllability of (q)PCR, by working under optimally controlled reaction conditions. Features, advantages and benefits of Extreme Uniform plastics.

PRODUCT GROUP	FEATURES	ADVANTAGES	BENEFITS
(q)PCR tubes & plates	Special blend of polypropylene	Anti-static tubes	Maximum sample recovery
		Tubes non sticking for biomolecules	Low copy detection
		Flexible non cracking tubes	No loss of sample
	Uniform wall thickness	Uniform heating	Consistent reaction conditions
		No risk of cracking	No loss of sample
		Minimize evaporation	Consistent reaction conditions
	Uniform closure part tube/strip/plate	Uniform closure & interchangeability	Consistent reaction conditions
	Thin wall lower part tube	Maximal heat transfer	Optimal reaction conditions
	Thick wall upper part tube	Minimal evaporation	Consistent reaction conditions
	Sealing ring in cap	Minimal evaporation	Consistent reaction conditions
	Clever design cap	Easy opening and closing	"Finger" and RSI Friendly
		Minimal evaporation	Consistent reaction conditions
	Wide area indented caps	No "finger touch" while closing	Highly reproducible results
	Wide range of (q)PCR products	Always a product to fit any thermocycler	Always best fitting plastics
	Frosted plates and tubes	Higher signal noise/ratio	Lower copy detection
	White plates and tubes	Highest signal noise/ratio	Low copy detection
		Avoid signal contamination from block	Consistent reaction conditions
	Breakable plates	Allow adjustment of required wells	Increased efficiency/lower cost
	Low profile tubes	Minimal evaporation	Consistent reaction conditions
	Asymmetric holes in strips	Make your own plate	Easy transport and positioning
	Optimal tube-block contact angle	Better heat transfer	Optimal reaction conditions
	Alpha numeric markings	Easy sample location	Traceability samples
	Auto-orientation holes	Easy sample identification	Traceability samples
	Frosted writing areas	Easy sample marking	Traceability samples
	Laser embedded marking and coding	Easy orientation	Traceability samples
		Uniquely coded	Avoid mix-up samples & trays
		Pipetting marker lines	Easy orientation
	Extra robust strips	No twisting or bending	Easy to handle
		In line and no breakage	Easy positioning and handling

PRODUCT GROUP	FEATURES	ADVANTAGES	BENEFITS
Filtertips and Tips	Special blend of polypropylene	Anti-static tips	Maximal sample recovery
		Tips non sticking for biomolecules	Low copy detection
		Flexible non cracking	Good fit & no loss of sample
		Natural and extremely clear	Easy view of contents
		Easy soft-fit and release from pipet	Limit RSI injuries
	Beveled Orifice (45°)	Improve sample rejection accuracy	Consistent pipetting conditions
	Graduated	Quick volume check	Minimize incorrect settings
	Extended length	Avoid pipet to tube contact	Minimize cross contamination
	18 micron filter	Superior protection	Minimize cross contamination
	Gradient Filter	Increases protection barrier	Minimize cross contamination
	Extended filter length	Increases protection barrier	Minimize cross contamination
	Modular Composed Tip Racks	Multi Application useable racks	Environment friendly
Micro Centrifuge tubes	Special blend of polypropylene	Anti-static tubes	Maximum sample recovery
		Easy opening & closing	Limit RSI injuries
		Flexible non cracking	No loss of sample
	Clever design cap (inner round)	No corners in “inner part”	Maximal sample recovery
	Graduated	Quick volume check	Helpful to avoid incorrect volumes
Screw Cap Tubes & Caps	Special blend of polypropylene	Anti-static tubes	Maximum sample recovery
		Easy opening & closing	Reduce RSI injuries
		Flexible non cracking	No loss of sample
		Wide applications range & temperature	No need for cryo tubes
	Clever design cap	Absence of rubber O-ring	No leakage nor breakage
			Suitable for organic solutions
			Work range -200 °C to 100 °C
		No corners in “inner part”	Maximum sample recovery
		Slightly triangled cap	No roll over of tubes
	Colored Tubes and Caps	Color Match of tube and cap	Minimize cross contamination
Work and Cryo Racks	Special blend of polypropylene	One hand opening & Closure	Increase flexibility
		Flexible non cracking	No loss of samples
		Wide applications range & temperature	No need for “special” cryo racks
	Clever design	Modular Composed Racks	Multi application usage
		Stackable	Space saving

Controllability of (q)PCR

To be able to obtain an accurate and reproducible result in (q)PCR, all variables of this process, including reagents, oligonucleotides, template DNA, plastics and thermocycler, need to be controlled.



The BIOzym group, through CYCLERtest BV and BIOplastics BV, focuses on the two variables which are most often under-estimated and overlooked: The (q)PCR plastics and the thermal performance of the (Real-Time) thermocycler.

CYCLERtest BV offers multi-channel thermal calibration equipment and ISO 17025 accredited calibration services for (q)PCR thermocyclers. For more information on calibration for (q)PCR thermocyclers refer to www.cyclertest.com, www.driftcon.com, www.celsiuslabs.com or call +31(0)45 533 8733.

BIOplastics BV manufactures Extreme Uniform plastics making it possible to control the plastic consumable aspect of the (q)PCR process. BIOplastics focuses on (q) PCR plates, strips and tubes as well as the disposables used during the pre- and post-(q)PCR process; more specifically filtertips, pipette tips, sampling tubes and racks, (cryo) storage tubes and racks, kit content reactions vessels and micro centrifuge tubes.

Extreme Uniform Plastics

To control your (q)PCR in the best possible way, so you can obtain the most reproducible and accurate results, BIOplastics developed a state-of-the-art range of (q)PCR disposables called: Extreme Uniform (q)PCR plastics.

These plastics are characterized by Extreme Uniformity in:

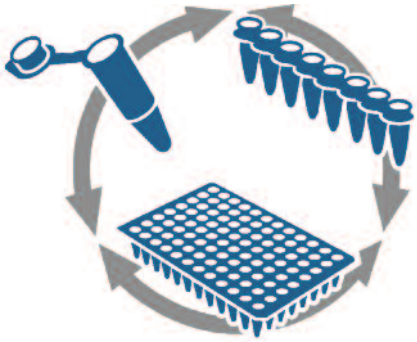
- Wall thickness
- Low evaporation rates
- High thermal conductivity (if applicable)
- Low binding
- High liquid retention (if applicable)
- High signal to noise ratios

Leading to extreme uniform reaction conditions in (q)PCR.

Why BIOplastics products are helpful in your lab

Interchangeability of products and processes

BIOplastics has assembled a range of products which are fully interchangeable with each other. A (q)PCR process optimized in one of the BIOplastics tubes, strips or plates can be transferred to any other BIOplastics tube, strip or plate. The fact that BIOplastics offers products for ALL BRANDS and models of PCR and qPCR cyclers enables the end-user to optimize the (q)PCR process using interchangeable plastics with the same properties. Using the same protocol on a different cycler is easily done by selecting the designated BIOplastics product for that model of cycler. No need for re-optimizing the whole process since BIOplastics' plastics characteristics are exactly the same for the whole range of the (q)PCR product line. Thermal performance difference between cyclers, cycler models, and brands can be exactly determined using CYCLERtest® calibration service or CYCLERtest® DRIFTCON® temperature calibration tools. See also "Normalizing Standard Operation Procedures (SOP) for (q)PCR applications (page 23). Did you optimize your (q) PCR process in tube strips and need more or less capacity? Just start using BIOplastics plates, single tubes or even 384 well plates without the requirement of adjusting your protocol.



Saving costs on reagents

Low evaporation properties enable (q)PCR performance in low volumes which greatly reduces reagent costs (up to 60%). BIOplastics does not recommend its products to be used with volumes below 5 µl. White plates and strips do allow significant signal enhancement in qPCR. In some cases the reagents usage can be reduced due to the much higher signals achieved.

Reduce the number of products and vendors. One product does it all

Some BIOplastics (q)PCR products are designed to fit the majority of PCR and qPCR cyclers. Similar products are available in the filter tip and pipette-tip range. Please review the Cycler to Product conversion (page 26-31) and Pipette to Product (page 68-73) charts in this catalog, use the dynamic charts from the BIOplastics website or contact BIOplastics or its distributor for the best recommendation to suit your needs. In most cases the variety of different products within the lab can be substantially reduced leading to fewer vendors while limiting improper part selection.

Eliminate ID# errors

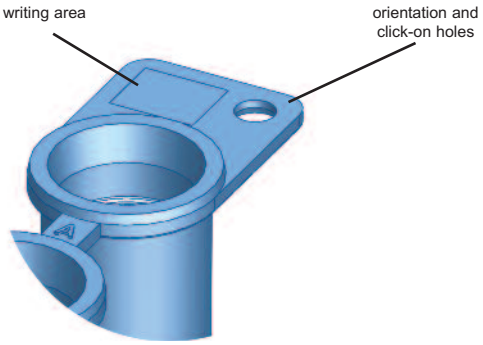
BIOplastics' BPLPM technique results in a non removable, uniquely marked and coded product. No writing with markers, no mistakes, no removal of marks, no double identification numbers, just use the unique ID# at the beginning of your process. Link the unique ID to your Lab LIMS system and samples. BPLPM technology is used in a selected range of products and will be extended in the future and on demand. BPLPM technology is particular useful for accredited labs and in Pre-diagnostics and Diagnostic settings allowing improvement of procedures and reducing risks of label failures. Custom layouts and customized codes are, depending on volume, available. These options are particularly useful for kit manufacturers to enable them to effectively trace products and applications.

B71060L

Why BIOplastics products are helpful in your lab

Reduce orientation and marking mistakes

Tubes strips are not symmetrical; many BIOplastics strips have off-center holes at top and centered holes at the bottom which provides easy orientation top-bottom. Tubes strips can be clicked on the "grid" permitting assembly of your own "plate". The frosted marking areas permit easy marking of tubes strips. Extra robust strips will not break and enable straight forward positioning of the strips into the cycler. Strip caps are available in extra robust formats which allows easy positioning, opening and closing.
Indented optical areas reduce "touching" the optical area while closing.



Reduce CO_2 emission, environmentally friendly plastics

Many people are, as we, concerned about the environment in relation to the use of plastics. BIOplastics is often contacted with the assumption to have a final solution for bio-degradable plastics as these plastics are also called "bioplastics". Be aware that we, at BIOplastics, are monitoring the development of these bio-degradable plastics carefully and are open to incorporating these plastics into our product portfolio. The current technology status and the type of applications, typically (q)PCR, does not (yet) allow us the use of bio-degradable plastics. However to drastically reduce the unnecessary pollution of our environment, BIOplastics has designed products that are interchangeable and can be use in a different lab application after serving the primary function. Some examples: filtertips and tip racks can be re-used as (freezer) storage containers for tubes, plates and strips. Furthermore you can use the rack to "pipette on ice" etc. The cardboard box in which the racked tips are supplied is made from recycled materials, and can be used as a display on your lab bench to organize and easily access the racks, after which it can be used as a bag holder. Plates are cutable and in some cases breakable which allows the use of only the required amount of products.

Carbon Dioxide

O=C=O

Standardize and improve reproducibility

BIOplastics manufactures and offers the widest range (q)PCR disposables. We offer products for ALL BRANDS of PCR and qPCR cyclers and integrate full interchangeability between these products. (see also "Interchangeability of products and processes") No need for shopping at different cycler manufacturers or vendors who are typically not manufacturers.
Enjoy the benefits and ease of use of superior quality (q)PCR vessels which all have the same raw material product compositions. Combine this with the extreme uniform wall thickness of the products and you actually have standardized and automatically improved the reproducibility of your results by excluding variables in uniformity and material composition.

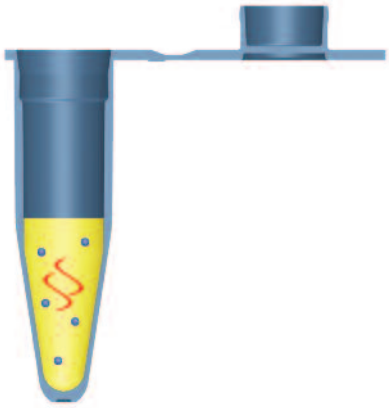
Color coded screw cap tubes, reduce cross contamination

Unlike any other screw cap tube (SCT) manufacturers, BIOplastics manufactures not only natural screw cap tubes but also colored screw cap tubes. Reduce possible cross contamination in your lab by only using color matching tubes and caps.

Why BIOplastics products are helpful in your lab

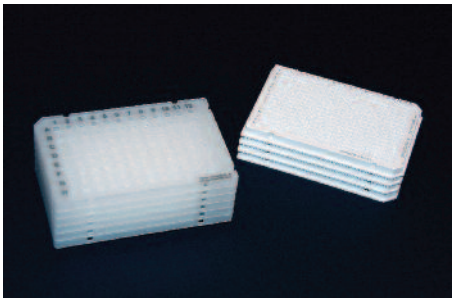
Low copy DNA, RNA and protein molecule detection through low binding characteristics

Polypropylenes are chemically inert, but still exhibit charged groups, static properties and hydrophobic areas. Different types or blends of polypropylene therefore do differ in binding characteristics and consequently charged groups like DNA, RNA, proteins and ions can bind in low amounts to polypropylene. BIOplastics (q)PCR and micro centrifuge tubes are developed with a specific blend of PP. The blend is designed to maximize product functionality and application while providing extremely low binding characteristics to DNA, RNA and proteins. Due to this extremely low binding PP properties the products are superior for detection of low copy numbers of DNA, RNA and proteins permitting reagent components such as ions and enzymes are solely used for the reaction process, not sticking to the vessel surface.
The binding (sticking) ratio of charged molecules like DNA, RNA and proteins between BIOplastics optimized PP blend and regular PP is typically 1:7 (1 to 7). (see also Anti Static tips PIPETTE TIPS, why, how and when they become favorable, page 17).



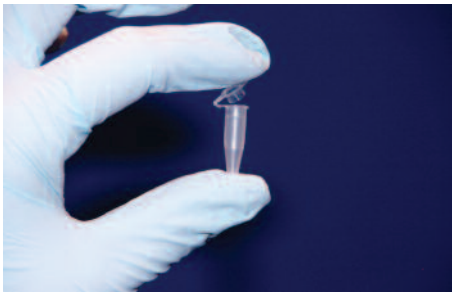
Flat stackable non-nesting plates

All BIOplastics plates are flat when purchased, which allows not only easy removal from a stack but also easy pipetting, positioning and removal from cyclers. Plates are stackable in a way that they do not nest or stick together. This is appreciated by those who dislike putting time and effort into de-stacking plates as well as those who require liquid handling automation without de-stacking failures. Some plates are cutable, some are breakable and most of them have 12 centered and 12 non-centered holes. This allows the ability to color code a plate by clicking a BIOplastics grid to the plate holes. This also provides easy orientation for a plate when part of it is cut. BPLPM technology provides “in product” permanent black markings (A-H, 1-12) as well as uniquely permanently coded plates.



Ease of use

As a manufacturer our focus has been to design products with superior primary functionality, and where possible, add ease of use and alternate use into the products. Below are several ease of use ideas.

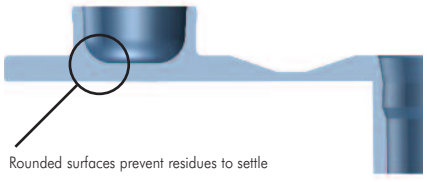


Single tubes can be easily opened and closed

Single tubes can be easily opened and closed by only using one hand. Single tubes can be placed in a BIOplastics grid. The grid can be placed in a rack, has functionality as transport medium to and from cyclers and can be positioned into the cycler. The X - Y format remains the same removing requirements of individual tube labeling!

High protein, DNA and molecule recovery by design

BIOplastics polypropylene blend is designed to maximize product functionality while providing extremely low binding characteristics to DNA, RNA and proteins. The design of the caps of BIOplastics tubes is different when compared to other caps. To prevent any residue settling in the cap, regardless opened or closed, BIOplastics designs all its caps without any groves, notches or cavity numbers. This design increases the recovery of liquid and its containing molecules. Furthermore, by nature of the design, liquid will automatically “drop down” to the bottom if the lids are in their closed position.



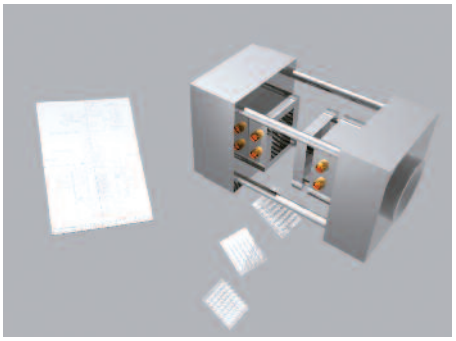
How BIOplastics technology leads to a superior quality

Extreme uniform moulds

In the design and development stage BIOplastics pays considerable attention to a strategy that provides maximum mould and manufacturing accuracy. We outline precise product specifications, minimize mould cavities and define product thresholds, resulting in superior and reproducible products with, in the case of (q)PCR vessels, an average wall thickness of 0.30 mm for tubes and strips and 0.35 mm for plates both with a maximum tolerance of 0.05 mm.

Low-cavity moulds

To manufacture tips, tubes or plates with the highest uniformity possible a low-cavity mould must be used in the production. This means only a few tips, tubes or plates are moulded during one cycle, after which the next few are moulded. Production from low cavity moulds takes more manufacturing time, and is therefore more costly than using high multi-cavity moulds from which 32, 64 or even 128 tips or tubes are released in one cycle. Competitor's products, often manufactured using high multi-cavity moulds, differ severely in tolerances and quality due to this production parameter. Manufacturing parameters of low cavity moulds are better controlled versus high cavity moulds. Injecting the polymer into a high multi-cavity mould (pressure/temperature) increases mould in-balance issues and consequently product inconsistencies. This can result in batches of tips, tubes or plates with extreme differences in wall-thickness, orifice and fit, which can influence the reproducibility of your experiment. BIOplastics products are manufactured using Low- and Semi-Low cavity moulds.



Extreme uniform manufacturing conditions

During the injection moulding process all physical, chemical and mechanical parameters are fine-tuned to obtain an Extreme Uniform plastic. Our superior in-house expertise allows us to determine the optimum balance between injection temperature of the polypropylene, the temperature of the mould itself during the cooling process, the injection time and the shrinkage time. The injection moulding process takes place in a dedicated clean room under GMP and hands-free conditions to ensure the absence of detectable levels of DNA, RNA, DNase, RNase, proteins, pyrogens and ATP.

Extreme uniform raw material blend

The polypropylenes used are of the highest medical grade polypropylene, which ensures no release of metals or other contaminants into the reaction mix. By careful selection of different types of polypropylenes and mixing these into well-defined proprietary ratios BIOplastics avoids the use of softeners, coatings and mould releasing agents.

How BIOplastics technology leads to a superior quality

Wall uniformity

Extreme Uniform wall thickness leads to lower evaporation rates and therefore more consistent (q)PCR results. Extreme uniform wall thickness also leads to even heating of the sample and more homogenous reaction conditions, leading to more reproducible results.

Non-EU Tube EU Tube

Cross section of a (q)PCR tube

Wall thickness and gas tightness

Polypropylene is not completely gas tight and evaporation through the walls is inevitable. BIOplastics BV designs its tubes with thin walls at the bottom, to allow maximum heat transfer by the thermocycler, and thicker walls at the top to minimize evaporation through the polypropylene, leading to more reproducible results.

Thin Wall Thickness of BIOplastics products is defined as, and measured, 3 mm from the bottom, where as:

Single tubes and strips :	0.30 mm +/- 0.05 mm
Plates:	0.35 mm +/- 0.05 mm

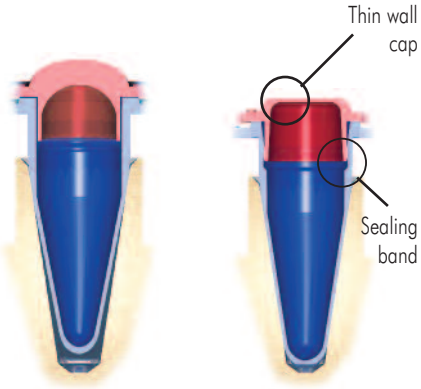
Regular profile tube Low profile tube

Tube angle, optimized for best fit

Different thermocycler brands and models have slightly different block well angles. BIOplastics uses its sister company's (CYCLERtest) competence and knowledge of (q)PCR cyclers during the (q)PCR vessel design. BIOplastics (q)PCR vessels features a tube angle optimized to fit all main brands and models of (q)PCR thermocyclers thus allowing maximum heat transfer and optimum results.

Low, regular and high profile products

In low profile tubes there is a smaller "air" volume above the reaction mix than in regular and high profile tubes. This allows less reaction mix to go into gas phase, leading to less concentration of the samples, less change in reaction conditions and therefore to more reproducible results. Most fast cyclers accept low profile tubes, strips and plates. Most regular (q)PCR cyclers accept regular profile and high profile products (tubes, strip-tubes and plates)



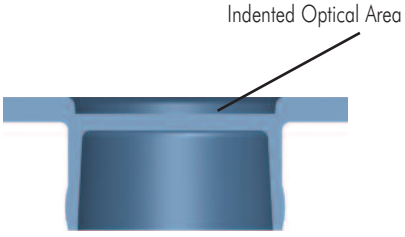
Non-EU Tube EU Tube

Easy opening and closure: cap design

Clever design and sealing rims around the tube closure points provide a leak-free seal, reducing evaporation and leading to more reproducible results. The superior sealing properties allows running (q)PCR reactions with volumes as low as 5 μl. The cap design allows minimum pressure for closure and opening which is highly appreciated by users and minimizes RSI risks.

qPCR caps and indented optical areas

The caps of EU tubes and strips are designed to enable fluorescent signals to pass through to the optical detection unit of a Real-Time thermal cycler. For the closure of EU strips and plates BIOplastics offers a range of EU wide optical area cap strips along with the "Optiseal" adhesive seals. The EU optical caps strips have maximum optical areas (12.6 mm^2) and the thickness of the "optical window" is reduced to 0.30 mm, which minimize light absorption of the plastics. BIOplastics' designers have positioned the "optical area" indented to the cap surface which prevents "touching" the optical area during the whole (q)PCR process. EU wide optical cap strips can be used on any of the (q)PCR tubes, strips and plates. The robust design prevents any deformation, and applying and removing these cap-strips is easy.

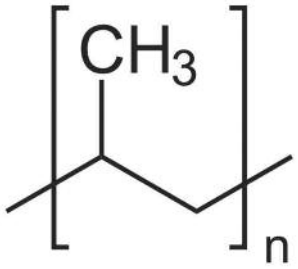


Indented qPCR Cap
the "optical area" is indented to the cap surface which prevents "touching" the optical area

How BIOplastics technology leads to a superior quality

Type and blend of polypropylene, low binding characteristics

Although polypropylenes are chemically inert, they still exhibit charged groups, static properties and hydrophobic areas. Different types and blends of polypropylene therefore show differences in binding of ions like magnesium, proteins, DNA and other charged groups which may influence your results. BIOplastics offers 3 different blends of polypropylene, these being O-type, A-type and M-type material. The O-type material is optimal material used in (q)PCR grade reaction vessels. A-type material resembles the classic polypropylene mix, has better chemical resistance properties when compared to O-type and is available for most of the (q)PCR reaction vessels. M-type material is a more robust material which is mainly used for 0.5 ml, 1.5 ml and 2 ml tubes and pipette tips. For (q)PCR applications we recommend O-type material for optimal results, as it is non-binding and shows the highest thermal conductivity. O-type and M-type material blends are specifically selected for non-binding characteristics to DNA, RNA and proteins.



Basic Structure of Polypropylene (PP)

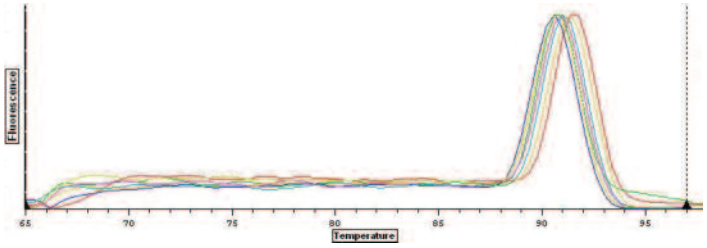
In product coding and Labeling with BIOplastics BPLPM technology

One of BIOplastics' latest innovations is the incorporation of micro particles in its (q)PCR and related product range. The BPLPM technology (BIOplastics particle mix) products are offered in addition to the regular range of (q)PCR products. While not interfering in the (q)PCR process, these particles, by nature, increase signal to noise ratio's in Real Time PCR applications.
BPLPM enables indelible IN PRODUCT labeling and identification. While others use ink, stamps, or dyes containing organic solutions or stickers, BIOplastics' BPLPM technique results in a non-removable, uniquely marked and coded product. No writing with markers, no mistakes, no removal of marks, no double identification numbers; just use the unique ID# at the beginning of your process. Link the unique ID to your Lab LIMS system and samples.
BPLPM technology is used in a selected range of products which will be increased in the future. BPLPM technology is particularly useful for accredited labs in Pre-diagnostics and Diagnostic settings to improve procedures and reduce the risks of label failures. Depending on purchase volumes, custom layouts and customized codes are available, and may prove useful for kit manufacturers to effectively trace products and applications.

Indelible in product labeling of a 384 well plate using BIOplastics BPLPM technology

HRM and regular melting curves

BIOplastics focus provides maximum mould and manufacturing accuracy, while precise product specifications result in superior and reproducible products. BIOplastics' (q)PCR vessels have an average wall thickness of 0.30 mm and a maximum tolerance of 0.05 mm. These extremely tight tolerances lead to extraordinary uniform and reproducible products.
Consequently, reproducible melting and high resolution melting curves, typically used in the post qPCR process, are generated using BIOplastics extremely uniform products. HRM curves can be normalized, i.e. "cycler fingerprint" adjusted, by using CYCLERtest®'cycler calibration services and calibration tools. (www.cyclertest.com)

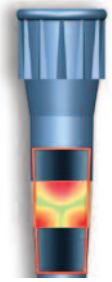


Shift of melting curves of one amplified fragment in qPCR. Shift caused by difference in qPCR plates as well as un-uniformity of the qPCR cycler.

How BIOplastics technology leads to a superior quality

Gradient filter in filtertips

The filter in a filter tip eliminates the formation of aerosols in the shaft of the pipette, since it blocks the air-to-liquid interface between the sample and the pipette shaft. This simple idea has evolved in numerous types and brands of filtertips and filter materials. Most filters are made of 3-dimensional cross-linked HMPE (Polyethylene), which is totally inert. The pore size should be smaller than 25 microns to generate a "reasonable protection" and not smaller than 14 microns to still allow an accurate airflow required when pipetting.
The filtering capacity of a certain filter is defined as the ratio of filter length and pore size.
The longer a filter is, the better it filters. This relation is almost linear. BIOplastics filters are the longest available in the market with a superior 18 micron pore size gradient. By applying a gradient into the filter, BIOplastics' filter tips have an extended airflow and a balanced optimal aerosol protection by pore size and filter length, still assuring pipetting accuracy.



Gradient 18 micron Filter with extended airflow and balanced optimal aerosol protection

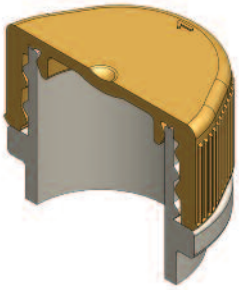
Pipette tips

BIOplastics tips have a very fine orifice for complete, reproducible pipetting. The pipette tips are extremely clear to allow content examination if required. Tips are extremely uniform, flexible and soft to secure a good, leak-free fit around the shaft of the pipette. The soft, ultra-clear medical grade material also reduces RSI injuries since the pressure to attach and release from the pipette is significantly reduced. The fine orifice assures reproducible pipetting. Tips marked with the beveled orifice icon have a special 45° beveled orifice to guide the discharge of the fluids even better.

Tips with fine orifice for complete, reproducible pipetting

Screw cap tubes

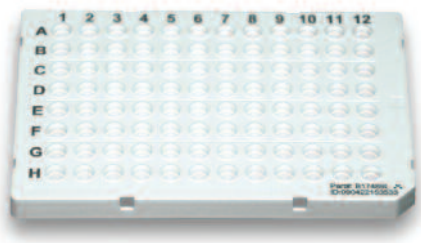
BIOplastics' smart secure closure technology is resulting in superior screw cap tubes.
The screw caps are designed in a way that the use of "old fashioned" rubber rings has become obsolete. The absence of a rubber ring assures that the closure is not affected when in contact with organic solvents nor that leakage occurs due to hardening and unbalanced shrinkage caused by low and high temperatures and pressure. The smart secure closure design allows frequent opening and closing, even in extreme conditions, without compromising the closure and also avoiding leakage (working range -200 °C -+100 °C).



Cross section of Screw Cap Tube closure with Smart Secure Closure technology in place

Unique coded tubes, strips and plates

Due to BIOplastics' BPLPM technology, products can be individually and uniquely coded. These products are available for the qPCR product range as well as for micro centrifuge tubes and screw cap tubes. Each tube can have a unique ID#. Specific codes or customized marked products are available on demand.



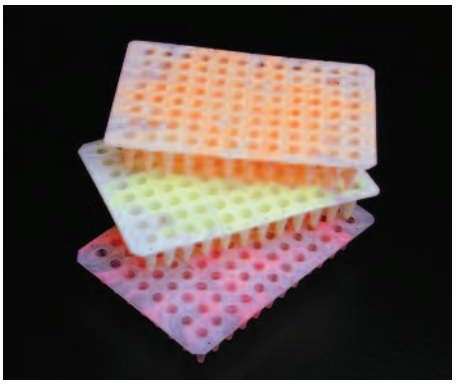
Unique coded Roche 480 qPCR plate (B17489) which fit Roche 480 qPCR cyclers

General information BIOplastics and (q)PCR applications

Colorful world of BIOplastics

Most BIOplastics products are offered in a wide range of colors. While black and white are solid non transparent colors all other colors are offered as "transparent" ones. Color products can be helpful to distinguish different applications or users in the laboratory. Colored products are manufactured by adding trace amounts of dye into the raw polypropylene blend.
The incorporated dye does not interfere your reaction parameters. qPCR signal to noise ratio's are substantially increased by using "white" vessels. Dye's other than white may, in combination with organic solutions, "diffuse" into the organic solution. If using organic solutions while processing reactions we recommend using natural or white color to prevent possible interference of dyes.

Colored tube support grids for color coding and positioning BIOplastics plates, strips and tubes



SW products: undefined swirling products

Some BIOplastics products are offered as swirling colors. Swirling colors are manufactured and collected while changing the injection moulding machine set-up from one color to an other color. It results in the same product qualification but in a variety of slightly changing colors. It looks like swirling undefined from one color to another.

Non cracking (q)PCR tubes, strips and plates

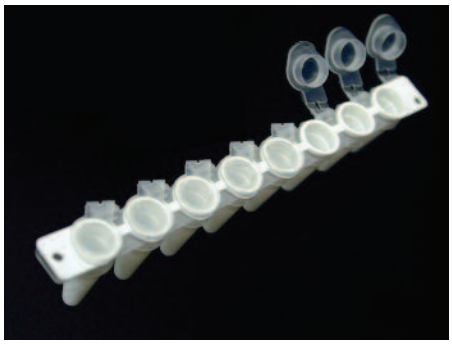
The careful selection of different types of polypropylenes combined with extreme uniform wall thickness benefits BIOplastics products in a way that they are not easy to crack.
BIOplastics products can therefore withstand mechanical pressure avoiding possible small, microscopic hairline cracks, not visible with the bare eye. So unlike most suppliers BIOplastics EU products are strong and flexible! No cracking and easy handling!

General information BIOplastics and (q)PCR applications

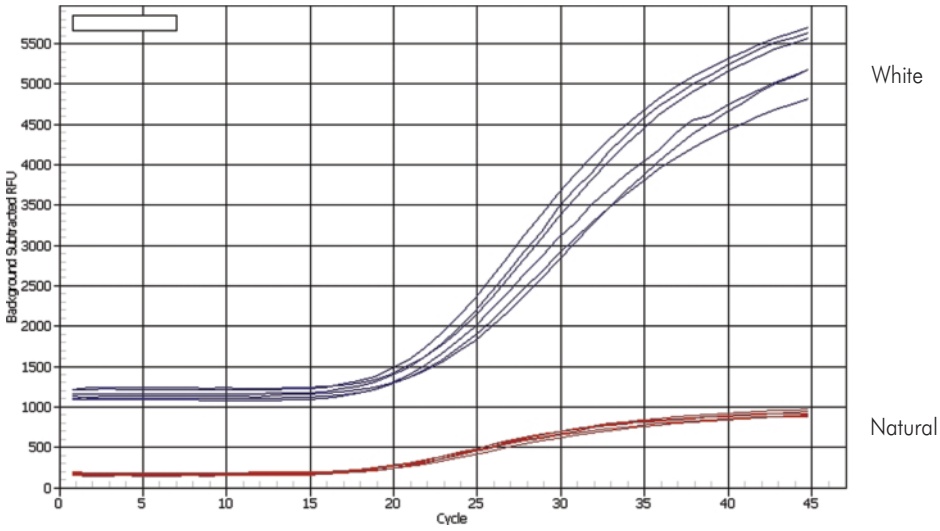
qPCR signal enhancement, white, frosted and light frosted products

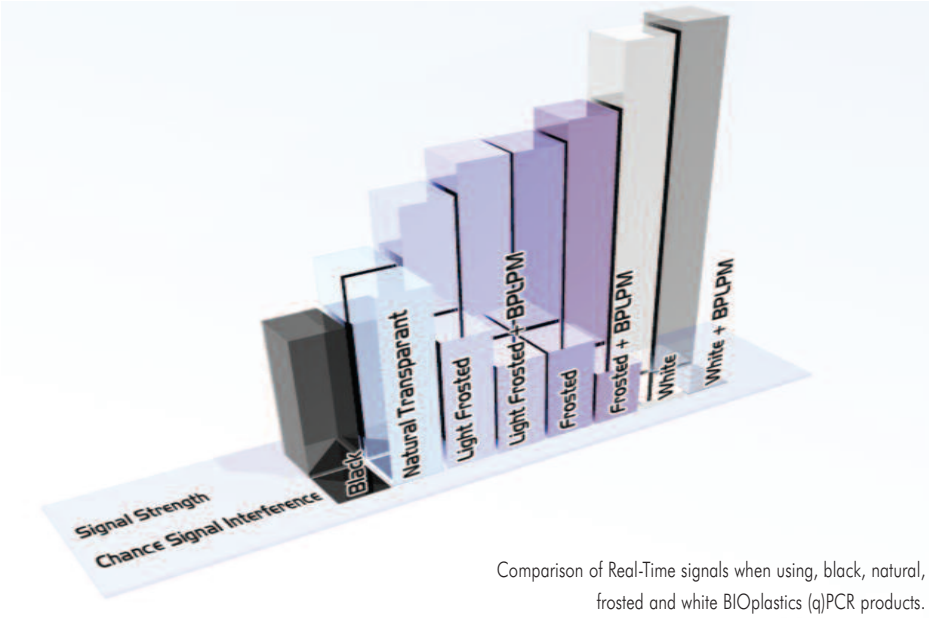
qPCR signal/noise ratios can be significantly increased by using frosted qPCR tubes, strips and plates. Frosted products will generate higher signal/noise ratios (up to 40%) compared to transparent ones.

By using frosted products both content viewability and high signal to noise ratio are achieved. White products are superior for enhancing signal/noise ratios. White products greatly enhance signal/noise ratios (up to 90%) compared to transparent ones and up to 50% compared to frosted products. Possible block pollution of dyes, differences in coatings, and inconsistent coatings can influence qPCR signals. White products will eliminate these influences while frosted products will reduce the inconsistencies when compared to natural transparent products. Micro-particles, by nature, increase signal to noise ratios in Real-Time PCR applications. BIOplastics BPLPM technology incorporates micro-particles that increase signal to noise ratios in Real-Time PCR applications.



"Click on" Caps enable maximum signal to noise ratios on white strips and individual closure of the tubes with the optical indented caps





Comparison of Real-Time signals when using, black, natural, frosted and white BIOplastics (q)PCR products.

PRODUCT TYPE	SIGNAL STRENGTH	Signal Interference PROBABILITY (Block pollution and/or condition)
Natural Transparent	100	100
Light Frosted	125	70
Light Frosted + BPLPM	140	50
Frosted	140	50
Frosted + BPLPM	150	30
White	180	< 2
White + BPLPM	185	< 1

General information BIOplastics and (q)PCR applications

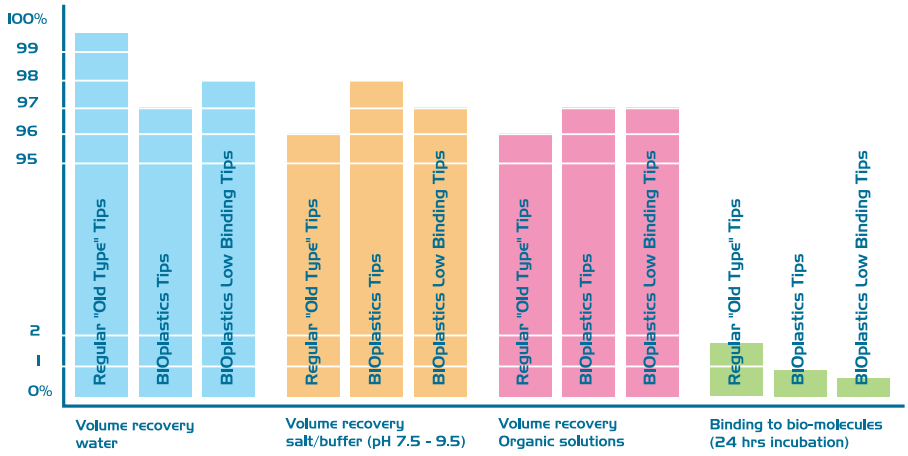
The EU Gold Standard for (q)PCR

BIOplastics BV has set the EU Gold Standard for (q)PCR by being in control of all variables in the process starting from the principle design up to the final packaging, with products of Superior Performance relative to signal, closure, evaporation, and reproducibility.

Anti static pipette tips.
Why, how and when they become favorable.

BIOplastics pipette tips are designed for use in molecular biological applications and more specifically for pipetting DNA, RNA, proteins and solutions commonly used in and around the (q)PCR process. BIOplastics has optimized its pipette and filter tips by means of design and raw material selection to meet highest requirements. By selecting medical grade materials with anti–static properties BIOplastics has reduced the biological molecule binding to the lowest possible. BIOplastics pipette tips become favorable when pipetting slightly basic buffers, salt solutions and biological molecules (Proteins, DNA, RNA). Differences in hydrophobic and hydrophilic properties of solutions, raw material surface and biomolecules are causing this pipetting difference "phenomenon" as shown below. If pipetting water contact us for regular "old type" tips.

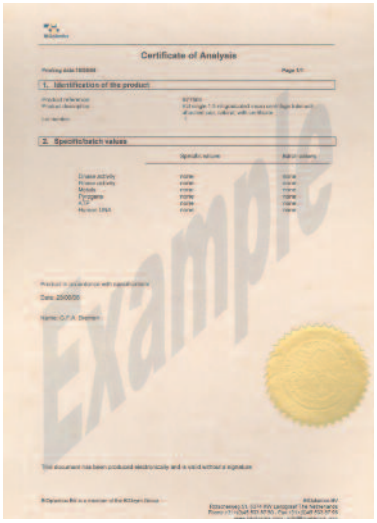
	Regular "Old Type" Tips	BIOplastics Tips	BIOplastics Low Binding Tips
Volume recovery water	99.8%	97%	98%
Volume recovery salt/buffer (pH 7.5 - 9.5)	96%	98%	97%
Volume recovery organic solutions	96%	97%	97%
Binding to bio-molecules (24 hrs incubation)	0.5 -1 %	< 0.2%	< 0.15%



General information BIOplastics and (q)PCR applications

Purity and certifications

Product purity is, along with excellent design and functionality of products, an important and solid foundation that enables customers to generate reliable, reproducible and trustworthy results. BIOplastics products are fully traceable and frequently tested during production. BIOplastics products comply with the highest standards and requirements. Polypropylenes are medical grade and fully incoming quality controlled prior to use in our proprietary blending methodology. All injection moulding process parameters, QC tests and packaging are monitored, logged and fully traceable.
If required, BIOplastics will provide batch certificates as well as individual certificates.



Autoclave when, how and why?

All BIOplastics products are autoclavable except the easy closure screw caps.
Autoclaving instructions: 15 minutes at 121°C and 2 bar pressure. Many confuse sterile products with DNa(se), RNa(se), Protein and DNA free products. BIOplastics (q)PCR products are manufactured free of any detectable levels of DNa(se), RNa(se), proteins and DNA. So the products do NOT REQUIRE any additional treatment. The AUTOCLAVING process DOES NOT REMOVE any DNA, RNA or proteins. It does however breakdown larger molecules and "kill" living organisms. So for BIOplastics products in general: use them as they come!

What is sterility?

A sterile product is a product which is free of any living micro-organisms. Sterilization of BIOplastics products is accomplished by means of ^{60}Co irradiation. Irradiated products age faster than non-irradiated products, they are less flexible and break more easily, because ^{60}Co irradiation slightly changes the characteristics of the polymer material. Autoclaving the product yourself is a more gentle process, but when done several times it will also harden the polymer. One could argue whether it is necessary to autoclave or irradiate BIOplastics (q)PCR disposables at all since our products are produced under clean room and "no-hands-on" conditions. See also autoclave when, how and why. (above)

^{60}Co irradiation exposed sticker as sterility indicator

What is DNa(se), RNa(se) and pyrogen-free?

Producing products under strict clean room and "no-hands-on" conditions ensures the absence of DNA, RNA, and their breakdown enzymes. A sterile product is not necessarily DNA(se), RNA(se) and pyrogen-free. Only regular testing during and after the production process guarantees a DNA(se), RNA(se) and pyrogen-free product. You can recognize the DNA(se), RNA(se) and pyrogen-free plastics in this catalog when you see the "thumbs-up" icon.

Human DNA and ATP absence?

Manufacturing products under strict clean and "no hands-on" conditions, as well as regular testing during and after the production process, ensures the absence of human DNA and ATP.

What is metal-free?

The absence of metals in polymer products like tips and tubes is essential for laboratory use as metals can interfere in (q)PCR and other reactions like ions as Mg^{2+}. BIOplastics tips and tubes are made of PP (Polypropylene) of the highest medical grade quality available and guaranteed metal free.

General information BIOplastics and (q)PCR applications

Raw material and product properties

Type of vessel	Application	Competitor vessel	BIOplastics tubes (M type)	BIOplastics (O type)
(q)PCR tubes, strips, plates	Binding to DNA %	Up to 2%	NA	< 0.3%
	Binding to proteins %	Up to 4 %	NA	< 0.8 %
	Temperature work range °C	mainly -20 to 100 °C	NA	- 30 to 100 °C
Microcentrifuge tubes 0.5, 1.5 & 2 ml	Binding to DNA %	Up to 5 %	< 1%	< 0.3%
	Binding to proteins %	Up to 6 %	< 1%	< 0.6 %
	Pop-Open at 99 °C	yes > 80%	No	No
	Temperature work range °C	mainly -20 to 95 °C	- 80 to 100 °C	- 80 to 100 °C
Screw cap tubes 0.5, 1.5 & 2 ml	Binding to DNA %	Up to 5 %	< 1%	< 0.3%
	Binding to proteins %	Up to 6 %	< 1%	< 0.6 %
	Accept organic solutions	No > 95%	Yes	Yes
	Temperature work range °C	mainly -25 to 100 °C	- 200 to 100 °C	- 80 °C to 100 °C
Titer dilution and storage tubes	Binding to DNA %	Up to 4 %	< 1%	NA
	Binding to proteins %	Up to 4 %	< 1%	NA
	Temperature work range °C	mainly -25 to 100 °C	- 180 to 100 °C	NA

CE markings and directive

Unlike many products, presently there is no CE directive for (q)PCR vessels, pipette tips, microcentrifuge tubes, screw cap tubes, or freezer (cryo) storage boxes. It is prohibited to apply a CE logo to products if there is no directive in place. BIOplastics BV products are fully traceable and frequently tested. BIOplastics products comply with the highest standards and requirements. If a CE directive transpires we will investigate our product compliancy and if necessary adjust to the directive.

CE

Pipette Tips, one tip fits all

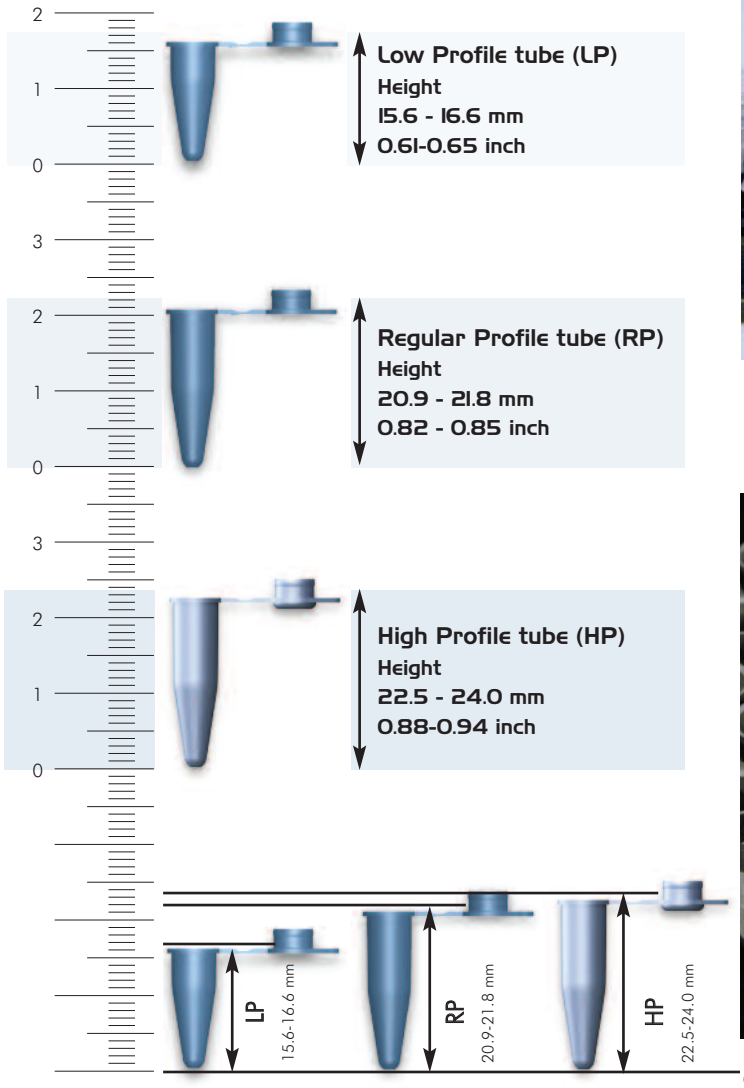
Depending on their pipette volume range, laboratories utilize a wide variety of pipette-tips. It is curious that pipette shafts are not standardized, which leads to a wide range of different pipette tips in the lab. BIOplastics has come up with a normalized solution to limit the range of pipette-tips required to one preferred type. BIOplastics engineers have designed adaptors, which can be placed over the shaft of your pipette to accept a tip without compromising discharge of the solution. These adaptors do link one type of tip to multiple pipettes of the same volume category. In some cases the shaft is adjusted by fit angle. Contact your BIOplastics representative for this service.

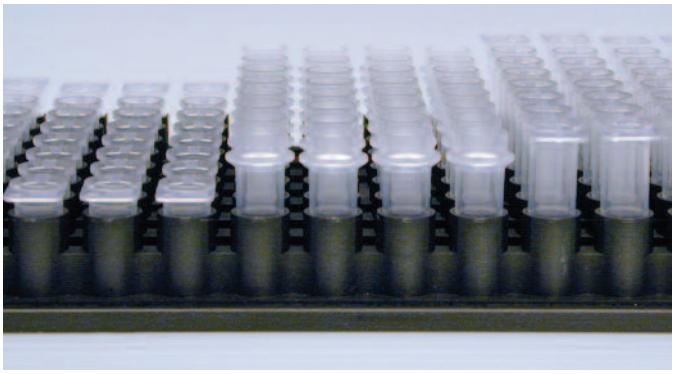
Differences

Low Profile, 0.1 ml tubes and fast cycler products

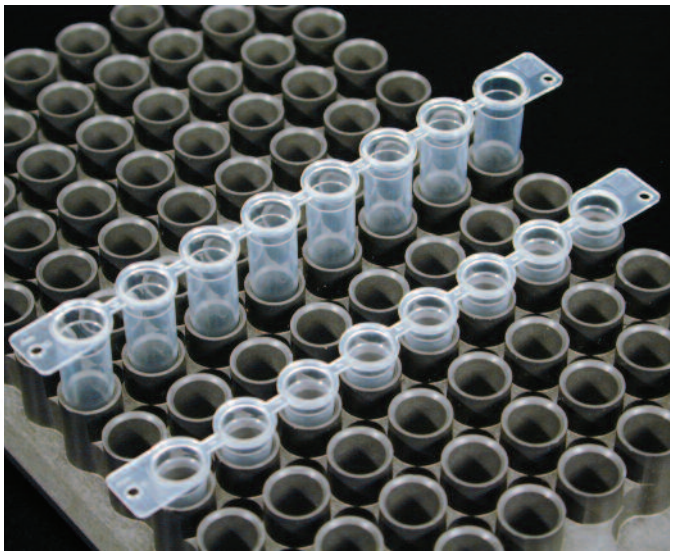
Regular Profile and High Profile products

Although low profile tubes were introduced in the marketplace back in 2000, some companies have renamed the original low profile 0.2 ml vessels description to 0.1 ml "vessel".
Low profile (0.1 ml) products are used in "fast cyclers" from ABI, Roche 480 cyclers as well in (q)PCR cyclers with height adjustable lids.
The difference between low profile 0.1 ml vessels and regular products is the height of the product and consequently the volume it can hold. More than half of a regular-profile strip remains above the thermal block level. In low profile tubes there is a smaller "air" volume above the reaction mix than in regular and high profile tubes. This allows less reaction mix to go into gas phase, leading to less concentration of the samples, less change in reaction conditions and therefore to more reproducible results. Most fast cyclers accept low profile tubes, strips and plates. Most regular PCR cyclers accept regular profile and high profile file products. (tubes, tube-strips and plates).
Thermal cyclers without height-adjustable heated lids accept only one type, mainly regular height products. BIOplastics products are available in all profile versions. The differences between low profile (0.1ml), regular profile and high profile products are illustrated in the drawing and photographs below.





Low Profile (LP) strips on the left, Regular profile (RP) strips in the middle and High Profile (HP) strips on the Right.



Low Profile (LP) strips on the right and Regular profile (RP) strips on the Left. Orientation, "click on" holes and writing areas on strips are visible.

Customized products and OEM requirements

Due to BIOplastics BV experience in developing and manufacturing of superior products and the recognition of an excellent quality to price ratio, the request for tailor made products for a variety of customers has become an additional aspect of BIOplastics BV.

BIOplastics BV can be a partner in the field of designing and manufacturing of:

- Large scale OEM (Original Equipment Manufactured) products
- New products
- Customized design
- Adjustment and standardization of pipette shafts

Other customized solutions are possible:

- Different material characteristics
- Different product properties
- Different colors
- Kit content solutions

Customized Solutions and products are based on BIOplastics BV core competencies and innovative technologies. Products can be designed according to your specific requirements and manufactured based on either exclusivity and/or intended to sell under client's brand name.

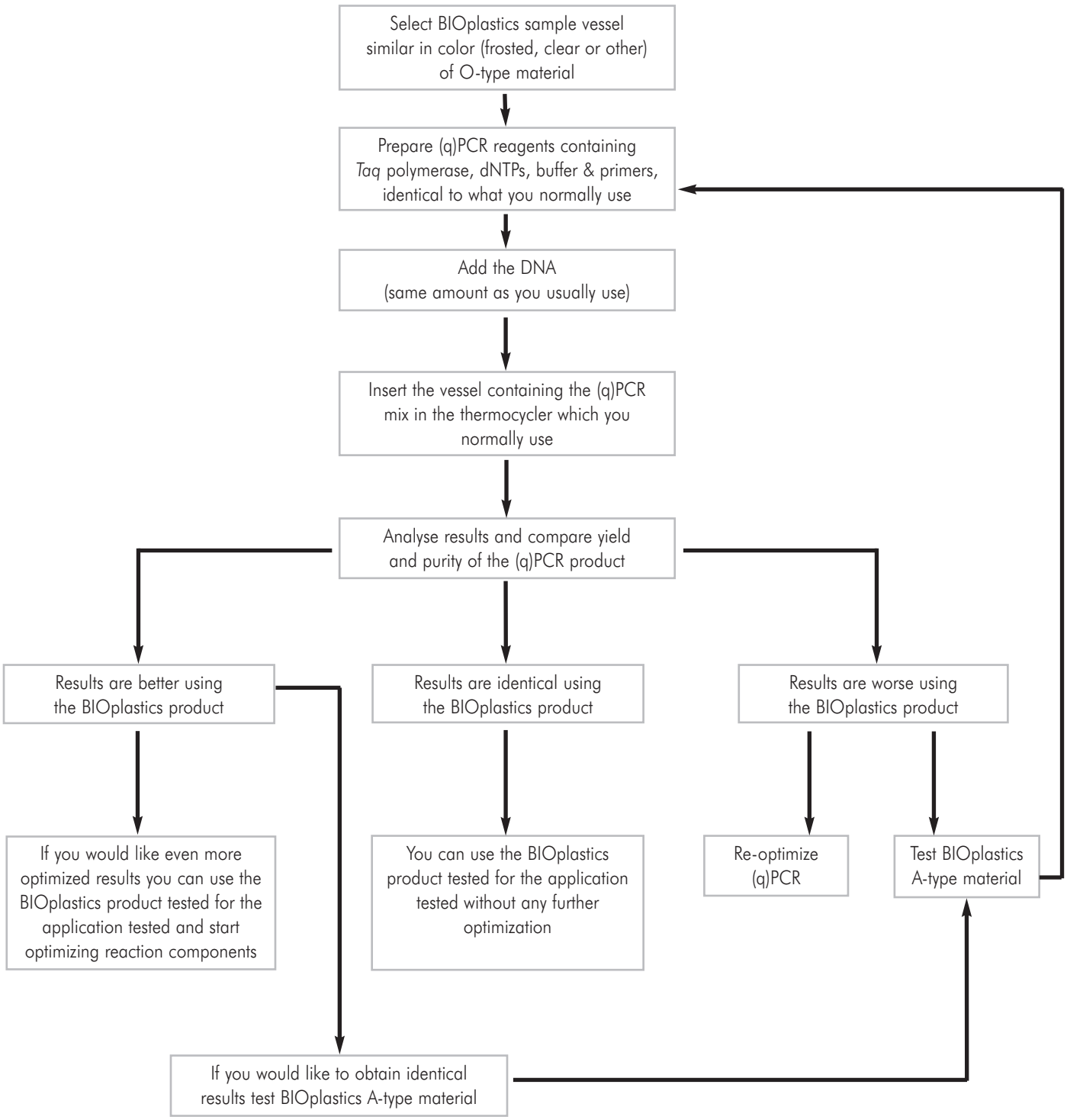
Customized Coded products using BPLPM Technology

- Single tubes
- Tube strips
- Plates (q)PCR
- Micro centrifuge tubes
- Titer Tubes
- Screw Cap Tubes
- Cryobox

Customized products and OEM requirements consultation

Please contact BIOplastics BV headquarters in The Netherlands or send an e-mail to OEM@bioplastics.com

How to compare your BIOplastics sample to your currently used (q)PCR plastics



Normalized SOP's for (q)PCR applications

Many laboratories have SOP (Standard Operation Procedures) in place. Incorporation of new components in SOP's are generally labor and time consuming. In the (q)PCR process, variables as cyclers, plastic disposables, kit components and work procedures are typically described and incorporated in SOP's. BIOplastics and CYCLERtest® have formulated a strategy which enables exclusion of the cycler as well as the used disposable variable. This strategy actually provides users the ability to normalize their SOP.

How does it work??

Since BIOplastics manufactures the widest and most uniform range of (q)PCR disposables which fit any brand or model of (q)PCR cyclers, and since BIOplastics produces its products identical in raw material properties and uniformity, one can exclude the disposable variation by using BIOplastics disposables. So instead of using a variety of disposables from different vendors resulting in different compositions and designs, required to fit your cycler range you can opt for one source (BIOplastics) only. Your disposables will then have exactly the same properties for different models of cyclers. By doing so you exclude differences in disposables. Combine this knowledge with the CYCLERtest® calibration service or the purchase of a DRIFTCON® system which enables you to "fingerprint" your cycler thereby excluding the cyclers variable.

So how do you normalize your SOP:

A: categorize your most sensitive (q)PCR protocol
B: Select your best cyclers which gives you superior results
C: Select the BIOplastics (q)PCR disposable which fits your best, superior result, cycler
D: Perform the same test to assure that the BIOplastics product is working on your "best cycler"
E: Calibrate (DRIFTCON® or MTAS® service) your best cycler and define its temperature fingerprint.
F: Calibrate (DRIFTCON® or MTAS® service) all other cyclers in your laboratory and define their temperature fingerprint.
G: You have now the translation key of temperature fingerprint between all your cyclers
H: Modify your cycler protocol (temperature) of any of your cyclers to match your best cycler fingerprint
I : Purchase the required specific disposable for your other cylers from BIOplastics assuring the same raw material composition and properties

RESULT: A UNIFORM SOP WHICH ASSURES IDENTICAL RESULTS REGARDLESS OF THE CYCLER USED

Problems in defining uniform SOP'S? Just let BIOplastics or CYCLERtest® know and we'll guide you through this CONVENIENT solution!!


Cycler 1


Cycler 2


Cycler 3


Cycler 4


Cycler 5 *

Normalized SOP's in practice

Assume Cycler 1 gives you the best results in your most sensitive application. Select a BIOplastics consumable which fits cycler 1 and run your most sensitive application. Your results should be the same or superior. If not optimize until you have the same result temperature fingerprint all cyclers by means of DRIFTCON® or MTAS®. (15 channel dynamic 2 Hz measurement)
In this example we call the fingerprint of Cycler 1: X
Determine the relationship between the cyclers and normalize the other cyclers (2-5) to cycler 1 by adjustment of the programmed protocol for temperature and time for each plateau:
Example the denaturation temperature was programmed: 95 degrees and actually measured was 94.5 °C= X
so if Cycler 1= X and Cycler 2= X - 0.3 °C, Cycler 3= X + 0.6 °C, Cycler 4= X - 0.9 °C, Cycler 5= X + 0.3 °C
then you should adjust and normalize the other cyclers for denaturation temperature as below:

Cycler 2: denature temperature to be programmed: 95.3 °C
Cycler 3: denature temperature to be programmed: 94.4 °C
Cycler 4: denature temperature to be programmed: 95.9 °C
Cycler 5: denature temperature to be programmed: 94.7 °C

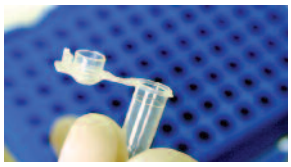
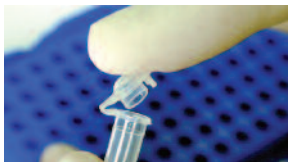
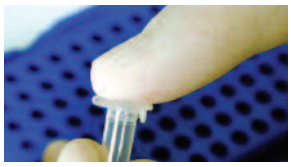
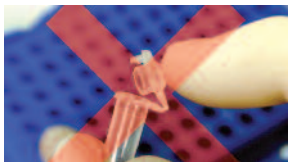
Now select any BIOplastics consumable which fit one or all cyclers (1-5). The Cycler fingerprint procedure comprises Heat/Cool rate, accuracy, uniformity, overshoots, undershoots, plateau time, hot spots, cold spots and control positions.
Problems in defining uniform SOP'S? Just let BIOplastics® or CYCLERtest® know and we'll guide you through.

* See Trade marks

How to open and close EU (q)PCR products....

EU products can be opened and closed many times without breaking, or losing their shape and sealing properties. When using single EU tubes, or strips with single attached caps, closure of the caps should be accomplished by pressing the front face end of the cap slightly backwards towards the hinge, and not by pushing it from the backside. Cap-strips should be applied in a parallel manner, and in an angle onto the strips and plates, preferably closing all 8 wells simultaneously. No special closing tools are required.

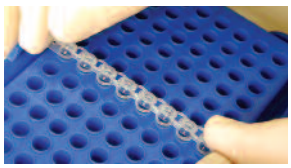
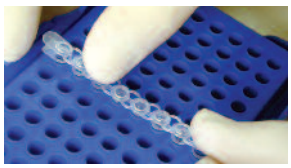
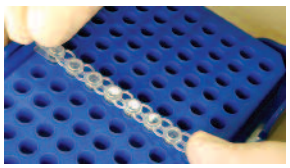
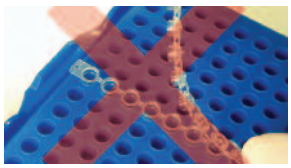
Closing single tubes

Press the front face end of the cap towards the hinge.

Do not press from backside towards front

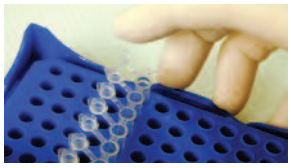
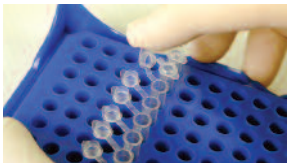
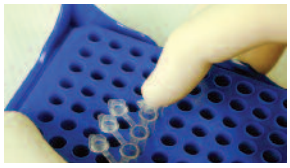
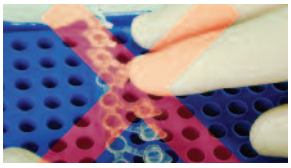
Closing strips with cap-strips

Apply cap-strips parallel and in a slight angle, before closing, start closing from middle towards outside (A4 to A1, A5 to A8).

Do not start from first tube towards last (A1 - A12)

Closing strips with single attached caps

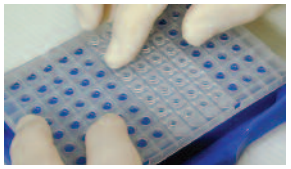
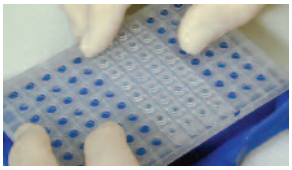





Press the front face end of the cap towards the hinge.

Do not press from backside towards front

Closing plates with cap-Strips

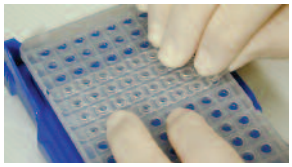
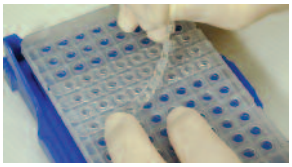
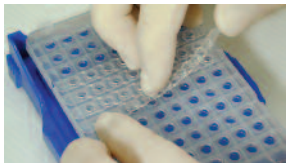
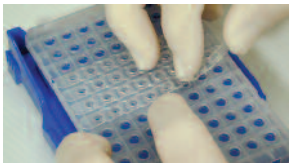


Apply cap-strips parallel and in a slight angle, before closing.

Do not start from first tube towards last (A1 - A12)

Opening and reclosing plates with cap-strips

Open the cap-strip starting from one side. When closing apply pressure per cap in the opposite direction.
E.g. open by removing cap-strip from A1 to A8 and reclosure from A8 to A1, while applying pressure towards A8, A7,A6 etc.

Do not start from the middle

I. (q)PCR PRODUCTS

0.1 ml & 0.2 ml (q)PCR tubes, strips and plates

The importance of disposables for a (q)PCR reaction is often underestimated. Money spent on kits, polymerases, primers, dyes, the optimization of reaction components and (q)PCR cycler calibration should be supported by superior BIOplastics (q)PCR tubes, strips and plates instead of the often used less qualified or even inferior products. Keywords here are: Reproducible and trustworthy results.

Enjoy the benefits and ease of use of superior quality (q)PCR vessels which all have the same raw material product compositions. Combine this with the extreme uniform wall thickness of the products and you actually have standardized and automatically improved the reproducibility of your results by excluding variables in uniformity and material composition.

Compatibility Chart PCR Thermocyclers

	Products	Single Tubes							8 & 12 Tube Strips											Strips with Attached Caps						Plates																	
		C78401	C(F)79401	B79401	B79001	B/C79801 (0.5 ML)	B77201	B77301	C(F)(A)79601	C(F)78601	B79901	B79601	B72711	B76601 (12 STRIP)	B69901	B56601 (12 strip)	B77101	B77001	B59901	C(F)78201	B79201	B72811	B72911	B79501 (+ B77101)	B79501 (+ B77001)	B70501	AB70651	B60101	B70651	B70671	AB17500(S)(L)	AB19800(L)	B71501	B50501	B50651	B17489(L)	B50240 (24)	B50340 (24)	B50601 (L)	B50751 (L)	B71601 (48)(L)	B70515(L) 384 Well	B71519 384 Well
Cycler		RP	RP	RP	HP		LP	RP	RP	RP	HP	LP	LP	LP	RP	RP	RP	LP	LP	RP	HP	LP	RP	RP	LP	RP	LP	LP	RP	LP	RP	LP	RP	RP	RP	LP	RP	LP	LP	LP	LP		
ABI																																											
2400	RP	V	V	V				V	V	V	V				V		V			V	V		V	V		Vc							Vc	Vc	Vc		V		Vc	Vc			
2700	RP	V	V					V	V	V	V				V		V			V	V		V	V		V			V		V+		V	V	V		V						
2720	RP	V	V					V	V	V	V				V	V	V			V	V		V	V		V			V		V+		V	V	V		V						
5700	RP	V	V					V	V	V				V	V+	V	V			V	V		V	V		V			V		V		V	V	V		V						
7000	RP							V	V	V	V			V	V+	V	V			V	V		V	V		V			V		V		V	V	V		V						
7300	RP							V	V						V+	V+	V			V			V	V		V					V+		V	V+	V+								
7500	RP							V	V						V+	V+	V			V			V	V		V					V+		V	V+	V+		V						
7500 Fast	LP						Va3					Va3	V	Va3				Va4	V			Va3			Va4							V							Va3				
7700	RP							V	V	V					V+	V+	V			V			V	V		V					V+		V	V	V		V						
7900	RP							Va7							V+	V+	Va7						Va7	Va8							V			V	V		V					V+	
7900 Fast	LP						Va5					Va5	Va5	Va5				Va6	Va5			Va5			Va6							V+							Va5				
9600	RP/HP	V	V	V	V		V	V	V	V	V	V		V	V	V	V	V		V	V	V	V	V	V	V			V		V+		V	V+	V+	V	V	V	V		V		
9700	RP	V	V					V	V	V					V+	V+	V			V			V	V		V			V		V+		V	V+	V+		V					V+	
9800 Fast	LP						V					V+	V+	V+				V	V+			V			V		V	V				V+				V		V	V	V	V		
StepOne	LP						V+					V+	V+	V+				V+	V+			V			V		Vc	Vc								Vc		V	Vc	Vc	V		
StepOne Plus	LP						V					V	V	V				V	V			V+			V		V	V				V+				V		V	V	V	V		
Veriti	RP							V+	V	V					V+	V+	V			V			V+	V		V			V		V+		V	V+	V+		V					V+	
Veriti Fast	LP						V+					V	V	V				V+	V			V+			V		V	V				V+						V	V	V	V		
Biometra																																											
Tpersonal	MP 48	V	V	V	V	V	V	V	V	V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	Vc	Vc						V	Vc	Vc		V	V	Vc	Vc	V		
T1	MP	V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V+	V	V	V	V			V	V	V	V	V	V	V	V	V	V	V
Tgradient	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V+	V	V	V	V			V	V	V		V	V	V	V	V		
T3000	MP	V	V	V	V	V	V	V	V	V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	Vc							V	Vc	Vc		V	V	V	V	V		
Tprofessional	MP	V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V+	V	V	V	V			V	V	V		V	V	V	V	V	V	V
Trobot	MP	V	V	V	V		V	V	V	V	V				V	V	V	V		V	V	V	V	V	V	V+	V	V	V	V			V	V	V	V	V	V	V	V	V	V	V
BioRad																																											
GeneCycler	RP	V	V	V	V			V	V	V	V				V+	V	V			V	V		V	V		Vc			V				Vc	Vc	Vc		V	V	Vc	Vc	Vc		
iCycler	RP	V	V	V	V			V	V	V	V				V+	V+	V			V	V		V	V		V			V				V	V+	V+		V					V	V
iCycler IQ	RP							V+	V	V	V				V+	V+	V			V	V		V	V		V			V				V	V+	V+		V					V	V
IQ5	RP							V+	V	V	V				V+	V+	V			V	V		V	V		V			V				V	V+	V+		V						
MyCycler	RP	V	V	V	V			V+	V	V	V				V+	V+	V			V	V		V	V		V			V				V	V+	V+		V						
MyIQ	RP							V+	V	V	V				V+	V+	V			V	V		V	V		V			V				V	V+	V+		V						
Ptc-100	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V			V	V	V	V	V	V	V	V	V		
Ptc-150	MP	V	V	V	V	V	V	V									V	V				V	V	V	V													V	V	V	V		
Ptc-200	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V			V	V	V	V	V	V	V	V	V	V	V
Ptc-225	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V			V	V	V	V	V	V	V	V	V	V	V
Opticon	LP						V					V+	V+	V+				V	V+			V			V		V	V		V						V		V	V	V	V		
Opticon2	LP						V					V+	V+	V+				V	V+			V			V		V	V		V						V		V	V	V	V		
MiniOpticon	MP						V+	V+	V	V	V	V+	V+	V+	V+	V	V	V	V+	V	V	V	V	V	V	Vc		Vc					V	Vc	Vc		V	V			V		
Chromo4	MP						V+	V+	V	V	V	V+	V+	V+	V+	V+	V	V	V+	V	V	V	V	V	V	V	V	V	V	V			V	V	V	V	V	V	V	V	V		
C-1000	LP						V					V+	V+	V+				V	V+			V			V		V	V		V						V	V	V	V	V	V		
S-1000	LP						V					V+	V+	V+				V	V+			V			V		V	V		V						V	V	V	V	V	V		
CFX96	LP/RP						V+		V	V	V	V+	V+	V+	V	V	V	V	V+	V		V	V	V	V	V	V	V	V	V			V	V	V	V	V	V	V	V	V		
CFX384																																										V	V
Cycler		RP	RP	RP	HP		LP	RP	RP	RP	HP	LP	LP	LP	RP	RP	RP	LP	LP	RP	HP	LP	RP	RP	LP	RP	LP	LP	RP	LP	RP	LP	RP	RP	RP	LP	RP	LP	LP	LP	LP		

See also Cycler to Product interactive options at www.bioplastics.com.

Blue: Low Profile cycler (96/48 x 0.1)
LP: Low Profile 0.1 ml
RP: Regular Profile

HP: High Profile
MP: Accept all Profiles
V: Fits

V+: Most optimal
Vc: Can be cut to fit
Va: Requires adaptor to fit

a1-8: adaptor model: see page 59

Compatibility Chart PCR Thermocyclers

		Single Tubes							8 & 12 Tube Strips											Strips with Attached Caps						Plates																		
	Products	C78401	C(F)79401	B79401	B79001	B/C79801 (0.5 ML)	B77201	B77301	C(F)(A)79601	C(F)78601	B79901	B79601	B72711	B76601 (12 STRIP)	B69901	B56601 (12 strip)	B77101	B77001	B59901	C(F)78201	B79201	B72811	B72911	B79501 (+ B77101)	B79501 (+ B77001)	B70501	AB70651	B60101	B70651	B70671	AB17500(S)(L)	AB19800(L)	B71501	B50501	B50651	B17489(L)	B50240 (24)	B50340 (24)	B50601 (L)	B50751 (L)	B71601 (48)(L)		B70515(L) 384 Well	B71519 384 Well
Cycler		RP	RP	RP	HP		LP	RP	RP	RP	HP	LP	LP	LP	RP	RP	RP	LP	LP	RP	HP	LP	RP	RP	LP	RP	LP	LP	RP	LP	RP	LP	RP	RP	RP	LP	RP	LP	LP	LP	LP			
Eppendorf																																												
MasterCycler	MP	V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V			V	V	V	V	V	V	V	V				
MC Gradient	MP	V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V			V	V	V	V	V	V	V	V				
MC ep Gradient	MP	V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V			V	V	V		V	V	V	V				
MC ep Gradient S	MP	V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V			V	V	V		V	V	V	V			V	V
MC Pro	MP	V	V	V	V		V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V			V	V	V		V	V	V	V			V	V
MC ep Realplex	RP	V	V	V	V+			V	V	V	V				V	V	V			V	V		V	V		V			V				V	V	V		V						V	V
MC Personal 16						V																																						
Stratagene/Agilent																																												
Robo-Cycler	MP	V	V		V	V	V	V	V	V	V	V	V	V	V	V	V		V	V	V		V	V		V	V	V	V	V			V	V	V									
MX3000P	RP		V	V				V	V	V					V	V	V			V			V	V		V			V				V	V	V		V							
MX3005P	RP		V	V				V	V	V					V	V	V			V			V	V		V			V				V	V	V		V							
MX4000	RP		V	V				V	V	V					V	V	V						V	V		V			V				V	V	V		V							
Roche																																												
LightCycler 480	LP						Va1					Va1	Va1	Va1				Va2	Va1			Va1			Va2		Va1	Va1								V+		Va1	Va1					V+
LightTyper	LP						Va1					Va1	Va1	Va1				Va2	Va1			Va1			Va2		Va1	Va1								V+		Va1	Va1					V+
Cycler		RP	RP	RP	HP		LP	RP	RP	RP	HP	LP	LP	LP	RP	RP	RP	LP	LP	RP	HP	LP	RP	RP	LP	RP	LP	LP	RP	LP	RP	LP	RP	RP	RP	LP	RP	LP	LP	LP	LP			
Abbot																																												
M2000rt	RP							V	V						V+	V+	V			V			V	V		V					V+		V	V+	V+		V							
Analytik-Jena																																												
FlexCycler	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V			V				V	V	V		V	V	V	V	V		V	V
Thermolyne																																												
Amplitron	MP	V	V	V	V	V		V	V	V	V				V	V	V			V	V		V	V		V			V				V	V	V		V	V	V	V	V			
Bioer																																												
Life Express	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V			V				V	V	V		V	V	V	V	V			
Line Gene	MP				V																																V	V	V	V	V			
Little Genius	MP	V	V	V	V	V	V	V	V	V	V	V	V		V		V	V	V					V	V												V	V	V	V	V			
XPcycler	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	.	.	V	V	V	.	V	V	V	V	V		.	.
Corbett Research																																												
PalmCycler	RP	V	V	V	V			V	V	V	V				V	V	V			V	V		V	V		V			V				V	V	V		V						V	V
Esco																																												
Swift Maxi	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V			V	V	V	V	V	V	V	V	V		V	V
Dupont																																												
BAQ Q7	RP							V	V						V+	V+	V			V			V	V		V					V+		V	V+	V+		V							
Cycler		RP	RP	RP	HP		LP	RP	RP	RP	HP	LP	LP	LP	RP	RP	RP	LP	LP	RP	HP	LP	RP	RP	LP	RP	LP	LP	RP	LP	RP	LP	RP	RP	RP	LP	RP	LP	LP	LP				

See also Cycler to Product interactive options at www.bioplastics.com.

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a1-8: adaptor model: see page 59

Compatibility Chart PCR Thermocyclers

	Products	Single Tubes							8 & 12 Tube Strips											Strips with Attached Caps						Plates																		
		C78401	C(F)79401	B79401	B79001	B/C79801 (0.5 ML)	B77201	B77301	C(F)(A)79601	C(F)78601	B79901	B79601	B72711	B76601 (12 STRIP)	B69901	B56601 (12 strip)	B77101	B77001	B55901	C(F)78201	B79201	B72811	B72911	B79501 (+ B77101)	B79501 (+ B77001)	B70501	AB70651	B60101	B70651	B70671	AB17500(S)(L)	AB19800(L)	B71501	B50501	B50651	B17489(L)	B50240 (24)	B50340 (24)	B50601 (L)	B50751 (L)	B71601 (48)(L)		B70515(L) 384 Well	B71519 384 Well
Cycler		RP	RP	RP	HP		LP	RP	RP	RP	HP	LP	LP	LP	RP	RP	RP	LP	LP	RP	HP	LP	RP	RP	LP	RP	LP	LP	RP	LP	RP	LP	RP	RP	RP	LP	RP	LP	LP	LP	LP			
EuroClone																																												
One **	RP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V	V	V							
peqSTAR	RP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V	V	V						V	V
Finnzymes																																												
Piko -24	LP						V					V	V				V	V	V			V		V	V													V						
Gene Technologies																																												
G-Storm	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
Labnet																																												
MultiGene	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
LongGene																																												
MyGene	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
Peqlab																																												
PeqSTAR	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
Primus 96	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V			
Scinics																																												
EZ Cycler	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
SensoQuest																																												
Labcycler	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
TaKaRa																																												
PCR Thermal Cycler Dice	RP	V	V	V				V	V	V					V	V	V			V			V	V		V			V		V		V	V	V		V							
Techne																																												
Flexigene	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
Genius	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
TC-312 & 3000	MP	V	V	V	V	V	V	V																													V	V	V	V	V			
TC-412 & 512	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
Techgene	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
Touchgene Gradient	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
Thermo Hybaid																																												
MultiBlock System									V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V		V	V
Omn-E	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
Omnigene TR3 CM220	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
PCR Express & Sprint	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
Px2	MP	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V				V	V	V		V	V	V	V	V		V	V
Cycler		RP	RP	RP	HP		LP	RP	RP	RP	HP	LP	LP	LP	RP	RP	RP	LP	LP	RP	HP	LP	RP	RP	LP	RP	LP	LP	RP	LP	RP	LP	RP	RP	RP	LP	RP	LP	LP	LP				

See also Cycler to Product interactive options at www.bioplastics.com.

Blue: Low Profile cycler (96/48 x 0.1)
LP: Low Profile 0.1 ml
RP: Regular Profile

HP: High Profile
MP: Accept all Profiles
V: Fits

V+: Most optimal
Vc: Can be cut to fit
Va: Requires adaptor to fit

a1-8: adaptor model: see page 59

Compatibility Chart Real-Time qPCR Thermocyclers

	Products	Single Tubes			8 & 12 Tube Strips								Strips with Attached Caps				Plates																
		B77201	B77301		B79601	B72711	B76601 (12 STRIP)	B69901	B56601 (12 strip)	B77101	B77001	B59901	B72811	B72911	B79501 (+ B77101)	B79501 (+ B77001)	B70501	AB70651	B60101	B70651	B70671	AB17500(S)(L)	AB19800(L)	B71501	B50501	B50651	B17489(L)	B50240 (24)	B50340 (24)	B50601 (L)	B50751 (L)	B71601 (48)(L)	B70515(L) 384 Well	B71519 384 Well
Cycler		LP	RP		LP	LP	LP	RP	RP	RP	LP	LP	LP	RP	RP	LP	RP	LP	LP	RP	LP	RP	LP	RP	RP	RP	LP	RP	LP	LP	LP	LP		
Abbot																																		
M2000rt	RP		V					V+	V+	V				V	V			V					V+		V	V+	V+		V						
ABI																																		
5700	RP		V				V	V+	V	V				V	V			V			V		V		V	V	V		V					
7000	RP		V				V	V+	V	V				V	V			V			V		V		V	V	V		V					
7300	RP		V					V+	V+	V				V	V			V					V+		V	V+	V+								
7500	RP		V					V+	V+	V				V	V			V					V+		V	V+	V+		V						
7500 Fast	LP	Va3			Va3	V	Va3				Va4	Va3	Va3			Va4								V+						Va3					
7700	RP		V					V+	V+	V				V	V			V					V+		V	V	V		V						
7900	RP		Va7					V+	V+	Va8				Va7	Va8								V			V	V		V				V+		
7900 Fast	LP	Va5			Va5	Va5	Va5				Va6	Va5	Va5			Va6								V+						Va5					
StepOne	LP	V+			V+	V+	V+				V+	V+	V			V		Vc	Vc								Vc		V	Vc	Vc	V			
StepOne Plus	LP	V			V	V	V				V	V	V+			V		V	V				V+				V		V	V	V	V			
BioRad																																		
iCycler	RP		V					V+	V+	V				V	V			V			V				V	V+	V+		V				V	V
iCycler IQ	RP		V					V+	V+	V				V	V			V			V				V	V+	V+		V				V	V
IQ5	RP		V					V+	V+	V				V	V			V			V				V	V+	V+		V					
Opticon	LP	V			V+	V+	V+				V	V+	V			V			V	V		V						V		V	V	V	V		
Opticon2	LP	V			V+	V+	V+				V	V+	V			V			V	V		V						V		V	V	V	V		
MiniOpticon	MP	V	V		V+	V+	V+	V+	V	V	V	V+	V	V	V	V		Vc		Vc					V	Vc	Vc		V	V			V		
Chromo4	MP	V	V		V+	V+	V+	V+	V+	V	V	V+	V	V	V	V		V	V	V	V	V			V	V	V	V	V	V	V	V			
CFX96	LP/RP	V			V+	V+	V+	V	V	V	V	V+	V	V	V	V		V	V	V	V	V			V	V	V	V	V	V	V	V			
CFX384																																	V	V
Dupont																																		
BAQ Q7	RP		V					V+	V+	V				V	V			V					V+		V	V+	V+		V						
Eppendorf																																		
MC ep Realplex	RP		V					V	V	V				V	V			V			V				V	V	V		V				V	V
Roche																																		
LightCycler 480	LP	Va1			Va1	Va1	Va1				Va2	Va1	Va1			Va2		Va1	Va1								V+		Va1	Va1				V+
Stratagene/Agilent																																		
MX3000P	RP		V					V	V	V				V	V			V			V				V	V	V		V					
MX3005P	RP		V					V	V	V				V	V			V			V				V	V	V		V					
MX4000	RP		V					V	V	V				V	V			V			V				V	V	V		V					

See also Cycler to Product interactive options at www.bioplastics.com.

Compatibility Chart Automatic Sequencers

	Products	8 & 12 Tube Strips			Plates		
		B69901	B56601 (12 strip)		ABA17500(L)	B70671	B50501
Sequencer		RP	RP		RP	LP	RP
ABI							
310	RP	V	V		V		V
3130	RP	V	V		V		V
3500	RP	V	V		V		V
3730	RP	V	V		V		V
Solid 3		V	V				

	Products	8 & 12 Tube Strips			Plates		
		B69901	B56601 (12 strip)		ABA17500(L)	B70671	B50501
Sequencer		RP	RP		RP	LP	RP
GE Healthcare							
MegaBACE™ 500	LP					V	
MegaBACE™ 1000	LP					V	
MegaBACE™ 4000	LP					V	

	Products	8 & 12 Tube Strips			Plates		
		B69901	B56601 (12 strip)		ABA17500(L)	B70671	B50501
Sequencer		RP	RP		RP	LP	RP
Beckman							
CEQ 8000	RP	V	V		V		V
CEQ 8800	RP	V	V		V		V
Transgenomics							
Wave MD System 4000	RP	V	V		V		V

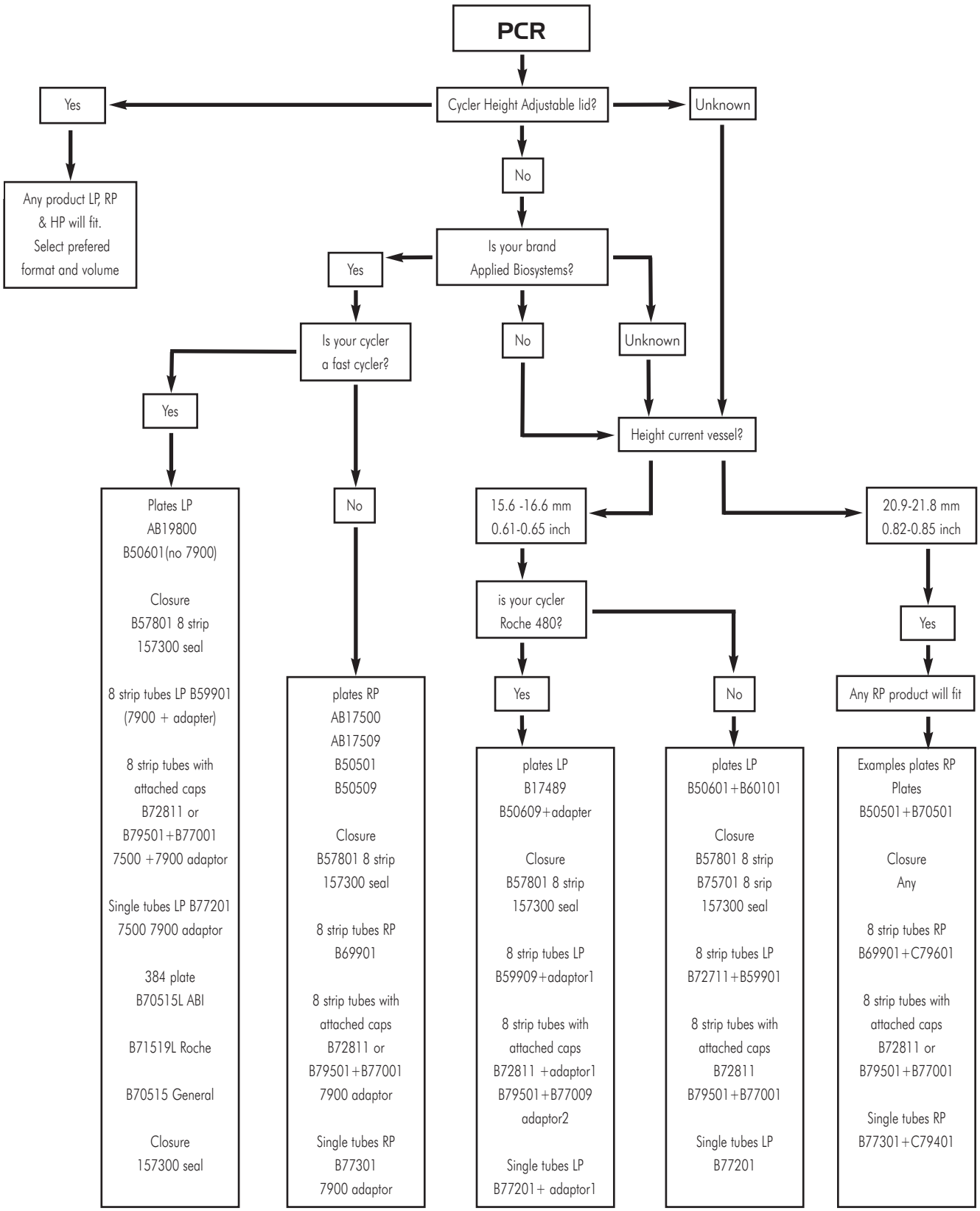
Blue: Low Profile cycler (96/48 x 0.1)
LP: Low Profile 0.1 ml
RP: Regular Profile

HP: High Profile
MP: Accept all Profiles
V: Fits

V+: Most optimal
Vc: Can be cut to fit
Va: Requires adaptor to fit

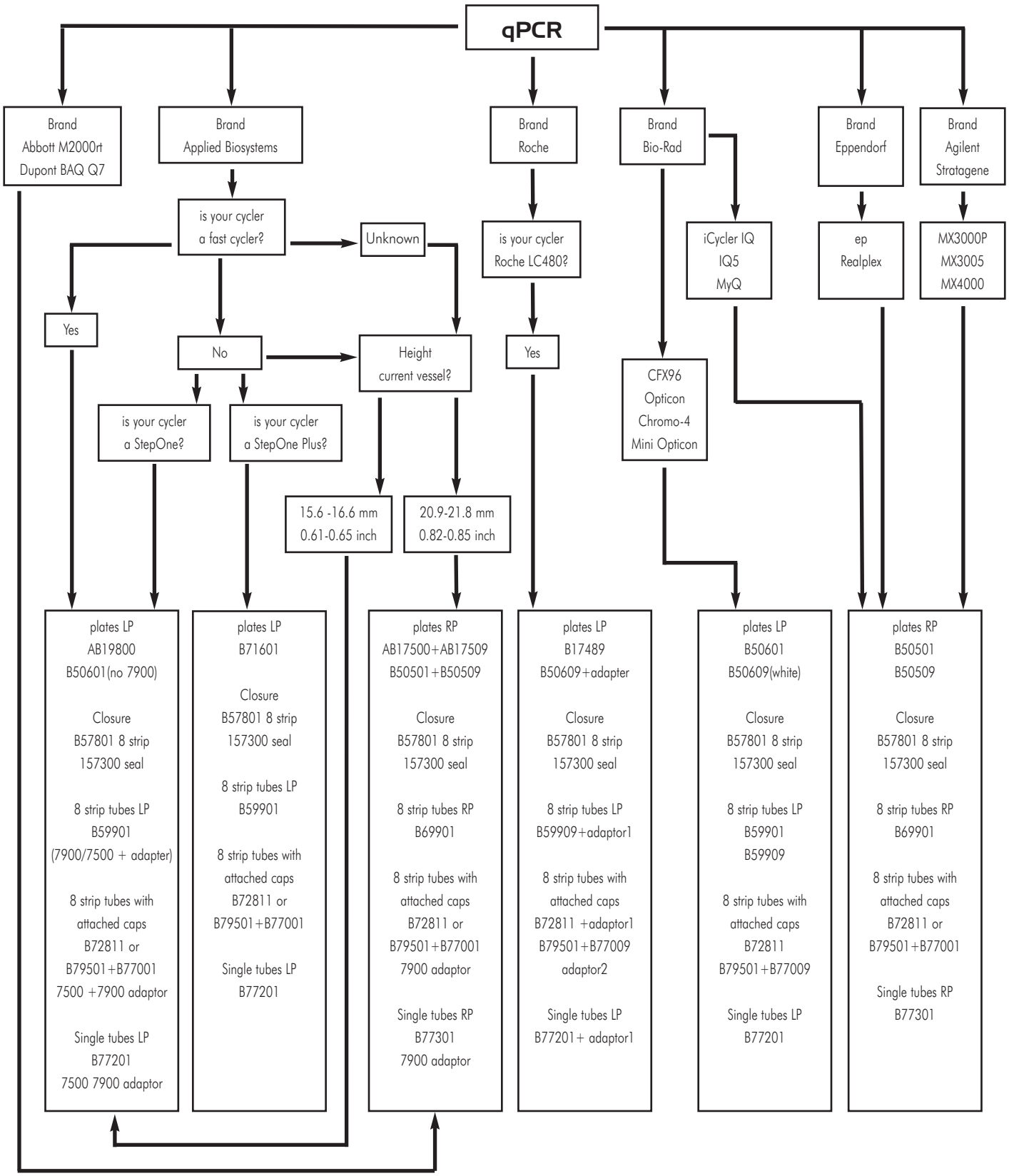
a1-8: adaptor model: see page 59

Quick Selector PCR Cycler to Product



See Cycler to Product charts (page 26-31) or the interactive options at www.bioplastics.com.
Cycler Adaptor overview at Page 51

Quick Selector qPCR Cycler to Product

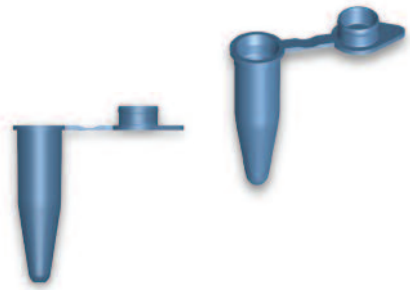


See Cycler to Product charts (page 26-31) or the interactive options at www.bioplastics.com.
Cycler Adaptor overview at Page 51

I.I.O 0.2 ml (q)PCR single tubes Regular Profile

0.2 ml Thin-wall tube with optical indented wide area cap, Regular Profile

12.6 mm²



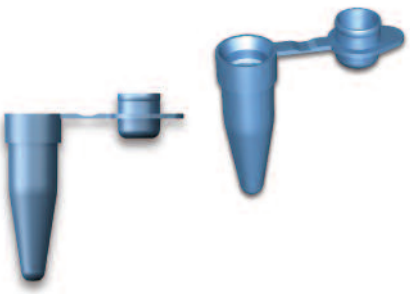
Fits almost all cycler models and qPCR cycler models which accept regular profile products.
(ABI non Fast cyclers), Bio-Rad, Eppendorf, Agilent and others) **ABI compatible.**
See Cycler to Product charts (page 26 - 31 or the interactive options at www.bioplastics.com).

Orderno	Description	Package Size
B77301	0.2 ml Thin-wall Tube, natural	bag, 1000

B77302	red	B77306	orange	B77310	black
B77303	blue	B77307	violet	B77311	natural, sterile
B77304	green	B77308	amber		
B77305	yellow	B77309	white		

Hint: Fits ABI 7300, 7500, 7900* non fast cyclers, 9700 , Bio-Rad, Eppendorf (*use specific adaptor mentione on page 59)
Excellent for qPCR

EU Classic 0.2 ml thin-wall tube with semi-domed cap, Regular Profile



Fits almost all cycler models which accept regular profile products.
See Cycler to Product charts (page 26 - 31 or the interactive options at www.bioplastics.com).

Orderno	Description	Package Size
C78401	EU Classic 0.2 ml Thin-wall tube, natural	bag, 1000

C78402	red	C78406	orange	C78410	black
C78403	blue	C78407	violet	C78411	natural, sterile
C78404	green	C78408	amber	C78412	SW colors
C78405	yellow	C78409	white		

EU Classic 0.2 ml thin-wall tube with extra strong semi-domed cap, Regular Profile

Fits almost all cycler models which accept regular profile products.
See Cycler to Product charts (page 26 - 31 or the interactive options at www.bioplastics.com).

Orderno	Description	Package Size
C79401	EU Classic 0.2 ml Thin-wall tube, natural	bag, 1000

C79402	red	C79408	amber
C79403	blue	C79409	white
C79404	green	C79410	black
C79405	yellow	C79411	natural, sterile
C79406	orange		
C79407	violet		

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For low profile tubes or 0.1 ml tubes see page 48.

I.I.0 0.2 ml (q)PCR single tubes, Regular Profile

EU 0.2 ml Thin-wall tube (High Profile) with optical flat cap.

Can be used in many 0.2 ml regular thermal cyclers (see tables on pages 26 - 31).

Orderno	Description	Package Size
B79001	EU 0.2 ml Thin-wall tube, natural	bag, 1000

B79002	red	B79006	orange	B79010	black
B79003	blue	B79007	violet	B79011	natural, sterile
B79004	green	B79008	amber	B79012	SW colors
B79005	yellow	B79009	white	A-type material available on request	

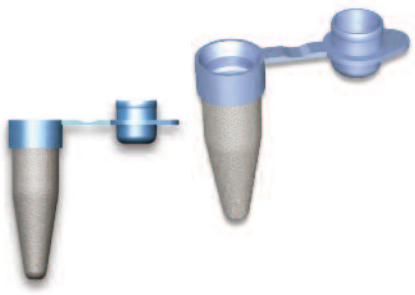
Hint: Do not use in ABI 9700. For use in ABI 9700 use B77301 page 32.

EU Classic 0.2 ml Thin-wall tube frosted with semi-domed cap, Regular Profile

Fits almost all cycler models which accept regular profile products.
See Cycler to Product charts (page 26 - 31 or the interactive options at www.bioplastics.com).

Orderno	Description	Package Size
CF78401	EU Classic 0.2 ml Thin-wall tube, Frosted, natural	bag, 1000

CF78402	red	CF78406	orange	CF78410	black
CF78403	blue	CF78407	violet	CF78411	natural, sterile
CF78404	green	CF78408	amber		
CF78405	yellow	CF78409	white		

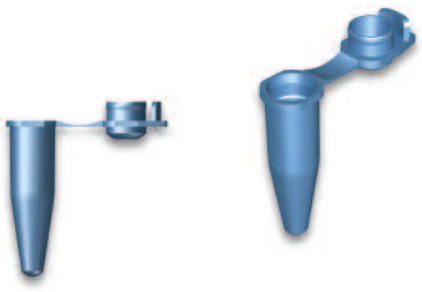


EU 0.2 ml Thin-wall tube with anti-contamination domed cap, Regular Profile

Can be used in many 0.2 ml regular thermal cyclers.
See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.

Orderno	Description	Package Size
B79401	EU 0.2 ml Thin-wall tube, natural	bag, 1000

B79402	red	B79406	orange	B79410	black
B79403	blue	B79407	violet	B79411	natural, sterile
B79404	green	B79408	amber		
B79405	yellow	B79409	white		

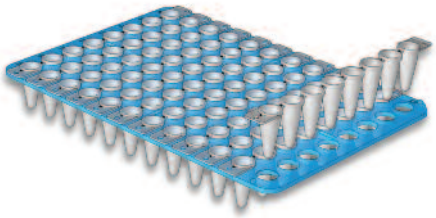


See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Low Profile tubes or 0.1 ml tubes see page 48.

I.I.I 0.5 ml PCR tubes and tube support grids

Tube support grid, make your own plate

Tube support grid holds plates, strips or individual tubes. The tube support grids are available in two formats (regular and wide) and in a range of colors, are alphanumerically marked and have knobs to fix EU tubes, strips and plates. Once the tube strips or plates are positioned, and after pipetting the required reagents, the Tube Support Grid is used as a carrier which can be placed in the thermal cycler, during the pre- and post cycling process.



Support grid: 11.3 cm (L) x 7.6 cm (W) x 0.15 cm (H)
4.48 inch (L) x 2.99 inch (W) x 0.06 inch (H)

Regular Area

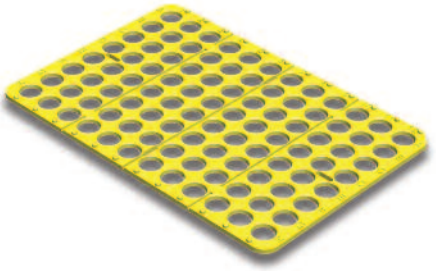
(Use with any product except "click on" strip-cap, and C7... tubes and C7....tube strips)

Orderno	Description	Package Size
B69301	Regular Pre-Post Tube support grid, can hold either EU Plates or tubes (strips), natural	8 grids

B69302	red	B69304	green	B69309	white
B69303	blue	B69305	yellow	B69310	black

Wide Area

(Use with "click on" strip-cap, color coding plates, C7... tubes and C7....tube strips)



Orderno	Description	Package Size
B69351	Wide version Pre-Post Tube support grid, can hold either EU Plates or tubes (strips), natural	8 grids

B69352	red	B69354	green	B69359	white
B69353	blue	B69355	yellow	B69360	black

EU 0.5 ml Graduated thin-wall tube with optical flat cap

0.5 ml PCR tube, fits 0.5 ml PCR Cyclers

Orderno	Description	Package Size
C79801	EU 0.5 ml Thin-wall Graduated tube with attached cap, natural	bag, 1000

C79802	red	C79806	orange	C79810	black
C79803	blue	C79807	violet	C79811	natural, sterile
C79804	green	C79808	amber	C79812	SW colors
C79805	yellow	C79809	white		

I.I.2 (q)PCR Multo Rack Systems

0.2 ml Work Rack. Multo Rack System

The Multo Rack System contains a 0.2 ml Multo Plate Rack and a Multo Rack Box. The Multo Plate Rack is Laser Mark Coded A-H, 1-12 and can hold 0.2 ml tubes, strips and plates. The Multo Rack Box is an assembly of the base and the lid.
Base and lid are "click-in" to become the Multo Box. The Multo Rack System is used as work, storage, freezer or cryo storage system. The Multo Rack System accepts any (q)PCR vessel or plate and closes securely. The limited height of 3 cm (1.2 Inch) enables the Multo Systems to be used for kit packaging as well as shipping system for valuable samples.

0.2 ml Multo Rack Systems

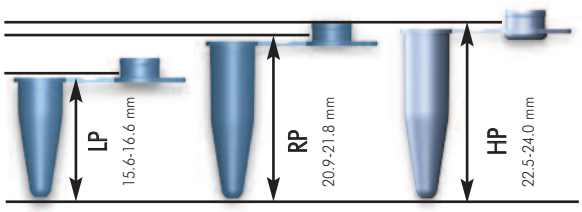
Rack positioned in box with Lid
Dimensions Multo Plate Box System:
Multo Plate Rack, 128.4 mm (W) x 85.9 mm (L) x 10.3 mm (H)
Multo Plate Box footprint, 134.8 mm (W) x 92.8 mm (L)
Multo Plate Box Maximum, 135 mm (W) x 103.6 mm (L) x 27.7 mm (H)

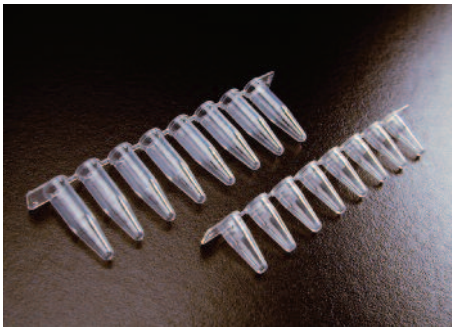
Orderno	Description	Package Size
B10440	Multo Rack in box with lid, Laser Mark Coded, natural	8 Racks

B10442	red	B10446	orange
B10443	blue	B10447	violet
B10444	green	B10449	white
B10445	yellow	B10452	Mixed Colors

Regular Profile 0.2 ml, High Profile 0.2 ml, Low Profile, 0.1 ml tubes and fast cycler products

Although low profile tubes were introduced in the marketplace back in 2000, some companies have renamed the original Low Profile 0.2 ml vessels description to 0.1 ml "vessel".
Low Profile (0.1 ml) products are used in fast cyclers as from ABI and Roche cyclers as well in (q)PCR cyclers with height adjustable lids.
The difference between low profile 0.1 ml vessels and regular products is the height of the product and consequently the volume it can hold. More than half of a regular profile strip remains above the thermal block level. In low profile tubes there is a smaller "air" volume above the reaction mix than in regular and high profile tubes. This allows less reaction mix to go into gas phase, leading to less concentration of the samples, less change in reaction conditions and therefore to more reproducible results. Most fast cyclers accept low profile tubes, strips and plates. Most regular PCR cyclers accept regular profile and high profile products. (tubes, tube-strips and plates).
Thermal cyclers which do not have height-adjustable heated lids accept only one type, mainly regular height products. BIOplastics products are available in all profile versions.
The differences between low profile (0.1ml), regular profile and high profile products are illustrated in the drawing and photograph below.



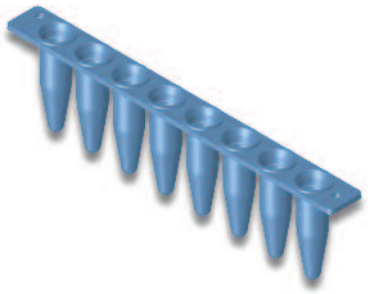


Low Profile (LP) and
Regular Profile (RP) strips.

I.I.3 0.2 ml (q)PCR 8-tube strips, Regular Profile

EU 0.2 ml Light frosted thin-wall 8-tube strip extra robust, Regular Profile

White



Fits almost all cycler models and qPCR cycler models which accept regular profile products (e.g. ABI, Bio-Rad, Eppendorf, Agilent-Stratagene).
Closure can be accomplished with any EU 8-cap strip. For qPCR use B57801 or B79701 cap strips. ABI compatible.

Orderno	Description	Package Size
B69901	EU 0.2ml Thin-wall 8-tube strip, Extra Robust, Regular Profile, Light Frosted, natural	bag, 120
B69909	EU 0.2ml Thin-wall 8-tube strip, Extra Robust, Regular Profile, Light Frosted, white	bag, 120
B69911	EU 0.2ml Thin-wall 8-tube strip, Extra Robust, Regular Profile, Light Frosted, natural, sterile	bag, 120
B69909L	EU 0.2ml Thin-wall 8-tube strip, ER, RP, positioned in grid, Laser Mark Coded, white	10 grids hold 120 strips

EU Classic 0.2 ml thin-wall 8-tube strip, Regular Profile

White

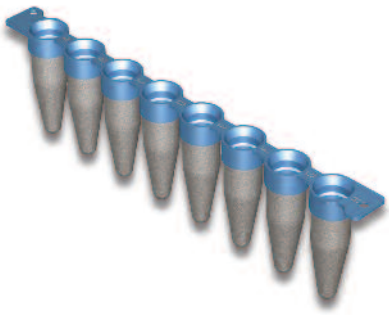
Can be used in most 0.2 ml block regular and Real-Time thermal cyclers. Closure can be accomplished with any BIOplastics 8-cap strip. For extra robust applications use B75701.

Orderno	Description	Package Size
C79601	EU Classic 0.2 ml Thin-wall 8-tube strip, Regular Profile, natural	bag, 120

C79602	red	C79607	violet
C79603	blue	C79608	amber
C79604	green	C79609	white
C79605	yellow	C79610	black
C79606	orange	C79611	natural, sterile

EU 0.2 ml Thin-wall frosted 8-tube strip, Regular Profile

White



Can be used in most 0.2 ml block regular and Real-Time thermal cyclers.
Closure can be accomplished with any EU 8-cap strip. For qPCR use B57801 or B79701 cap strips.

Orderno	Description	Package Size
CF78601	EU 0.2 ml Thin-wall 8-tube strip, natural, frosted	bag, 120

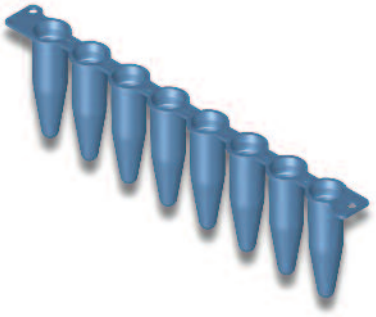
CF78602	red	CF78606	orange	CF78610	black
CF78603	blue	CF78607	violet	CF78611	natural, sterile
CF78604	green	CF78608	amber		
CF78605	yellow	CF78609	white		

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Low Profile 8-tube-strips (0.1 ml) see page 49. For 8-Cap Strips see page 42 - 43.

I.I.3 0.2 ml (q)PCR 8-tube strips, Regular Profile

EU 0.2 ml Light Frosted Thin-wall 8-tube Strip, Regular Profile

White



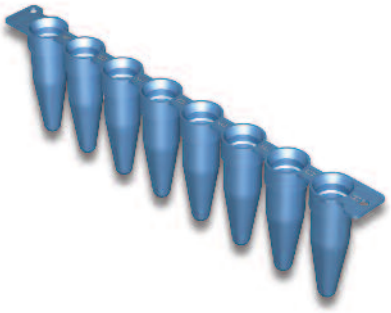
Fits almost all cycler models and qPCR cycler models which accept Regular profile products. (ABI, Bio-Rad, Eppendorf, Agilent-Stratagene). This strip can be used in combination with the 8-Single attachable Indented Cap strip.Closure can be accomplished with any EU 8-cap strip. For qPCR use B57801, B79701 cap strips or B79501 EU 8-Single attachable Indented Cap. ABI compatible.

Orderno	Description	Package Size
B77101	EU 0.2ml Thin-wall 8-tube strip, Regular Profile, Light Frosted, natural	bag, 120
B77109	EU 0.2ml Thin-wall 8-tube strip, Regular Profile, Light Frosted, white	bag, 120
B77109L	EU 0.2ml Thin-wall 8-tube strip,ER, RP, LF, Laser Marked Coded, white	10 grids hold 120 strips

B77102	red	B77105	yellow	B77108	amber
B77103	blue	B77106	orange	B77110	black
B77104	green	B77107	violet	B77111	natural, sterile

EU 0.2 ml Thin-wall 8-tube strip, Regular Profile

White



Can be used in most 0.2 ml block regular and Real-Time thermal cyclers.
Closure can be accomplished with any EU 8-cap strip.
For qPCR use B57801 or B79701 cap strips.

Orderno	Description	Package Size
C78601	EU 0.2 ml Thin-wall 8-tube strip, natural	bag, 120

C78602	red	C78606	orange	C78610	black
C78603	blue	C78607	violet	C78611	natural, sterile
C78604	green	C78608	amber		
C78605	yellow	C78609	white		

EU 0.2 ml Thin-wall 8-tube strip, High Profile

White

Can be used in most 0.2 ml block regular thermal cyclers, except ABI 7900.
(see tables on pages 26 - 31).Closure can be accomplished with any EU 8-cap strips.

Orderno	Description	Package Size
B79901	EU 0.2 ml Thin-wall 8-tube strip, natural	bag, 120

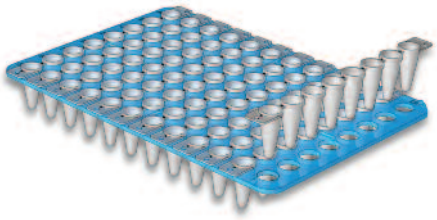
B79902	red	B79906	orange	B79910	black
B79903	blue	B79907	violet	B79911	natural, sterile
B79904	green	B79908	amber		
B79905	yellow	B79909	white		

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Low Profile 8-tube-strips (0.1 ml) see page 49. For Cyclers adaptors see page 59.

I.2.0 0.2 ml (q)PCR 8-tube strips with optical single attached caps

Tube support grid, make your own plate

Tube support grid holds plates, strips or individual tubes. The tube support grids are available in two formats (regular and wide) and in a range of colors, are alphanumerically marked and have knobs to fix EU tubes, strips and plates. Once the tube strips or plates are positioned, and after pipetting the required reagents, the Tube Support Grid is used as a carrier which can be placed in the thermal cycler, during pre- and post the cycling process.

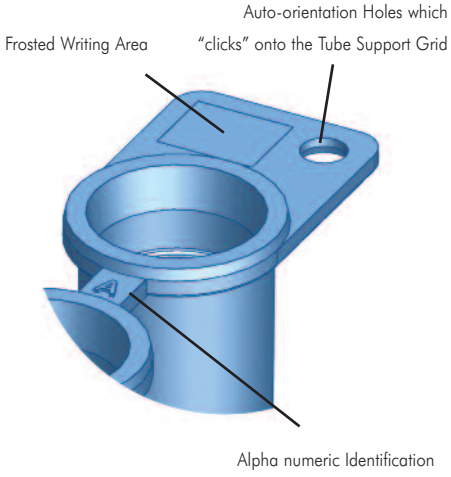


Support grid: 11.3 cm (L) x 7.6 cm (W) x 0.15 cm (H)
4.48 inch (L) x 2.99 inch (W) x 0.06 inch (H)

Wide Area (use with click on strip-cap, color coding plates, C7... tubes and C7....tube strips)

Orderno	Description	Package Size
B69351	EU Pre-Post Tube support grid, can hold either EU Plates or tube (strips), natural	8 grids

B69352	red	B69355	yellow
B69353	blue	B69359	white
B69354	green	B69360	black



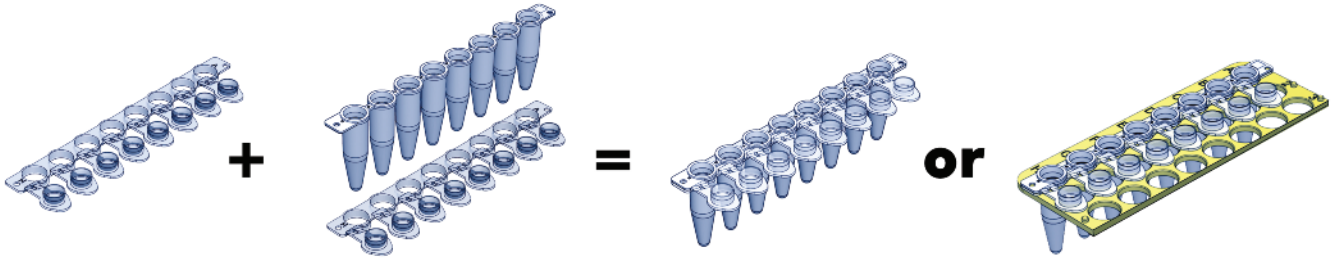
Regular (use with single tubes, tube-strips and plates except C7... tubes and C7....tube strips)

Orderno	Description	Package Size
B69301	EU Pre-Post Tube support grid, can hold either EU Plates or tube (strips), natural	8 grids

B69302	red	B69305	yellow
B69303	blue	B69309	white
B69304	green	B69310	black

Click-on Cap™ strip, individual cap closure of (white) qPCR tube strips

The Click-on Cap™ Strip allows individual closure of (q)PCR tube strips. Limiting cross contamination and the possibility of signal enhancement in Real-Time PCR are two highly valued features that benefit users. It enables the use of white strip tubes combined with clear caps which can be individually closed. The new Click-on 8-cap strip does add an important feature to the existing range. "Clicking" the EU 8-Single Attachable Indented Cap strip to either BIOplastics low profile or regular profile 8 tube-strip enables full flexibility in composing colored 8-tubes-strips with natural clear single attachable optical caps. In most cases this feature is used as a combination of white 8 tube-strips and optical clear flat caps. Click-on Caps™ can be used in combination with BIOplastics (q)PCR strips type B77001 (Low Profile) and B77101 (Regular Profile).
These combinations will work in all ABI, Bio-Rad and Roche LC 480 Real-Time and Real-Time fast cyclers. Some combinations require the use of an adaptor. (See www.bioplastics.com and Cycler Adaptor overview at Page 59)

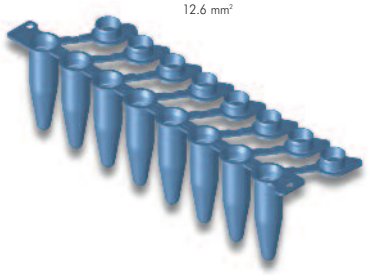


See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Low Profile 8 tube-strips (0.1 ml) with attached caps see page 52 - 53.

1.2.0 0.2 ml (q)PCR 8-tube strips with optical single attached caps

EU 0.2 ml Thin-wall 8-tube strip with single attached optical indented wide area cap, Regular Profile

12.6 mm²



Fits almost all cycler models and qPCR cycler models which accept regular profile products. (e.g. ABI, Bio-Rad, Eppendorf, Agilent-Stratagene) See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com. ABI compatible.

Orderno	Description	Package Size
B72911	EU 0.2 ml Thin-wall 8-tube strip with single attached optical caps, (Regular Profile), natural	.bag, 120
B72911L	EU 0.2 ml Thin-wall 8-tube strip with single attached optical caps, RP, Laser Mark Coded, natural	.bag, 120

Not available in the USA, alternative for the USA: B79501 + B77101, see below

Self composition package (q)PCR

12.6 mm²

Fixed component I

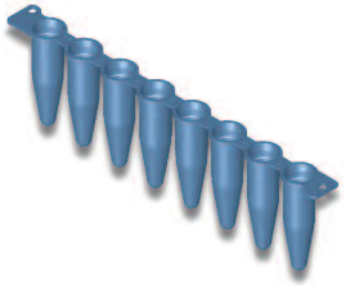
EU 8-Single attachable optical wide indented cap

For closure of (q)PCR 8-tube strips type B77001 (Low Profile), B77101 (Regular Profile)

Orderno	Description	Package Size
B79501	EU 8-Single attachable Optical Wide indented cap-strip, natural	10 grids hold 120 strips

Component 3 for composing Regular Profile Thin-wall 8-tube strip with single attached cap

EU 0.2 ml Light frosted thin-wall 8-tube strip Regular Profile



Fits almost all cycler models and qPCR cycler models which accept Regular profile products. (ABI, Bio-Rad, Eppendorf, Agilent-Stratagene) See Cycler to Product charts (see tables on page 26 - 29) ABI compatible.

Orderno	Description	Package Size
B77101	EU 0.2ml Thin-wall 8-tube strip, Regular Profile, Light Frosted, natural	.bag, 120
B77109	EU 0.2ml Thin-wall 8-tube strip,Extra Robust, Regular Profile, Light Frosted , white	.bag, 120
B77109L	EU 0.2ml Thin-wall 8-tube strip, ER, RP, Light Frosted, Laser Mark coded, white	10 grids hold 120 strips

For colored variants see page 37.

Advised work protocol for component I and 3

1.Position single attachable cap-strip in Tube Support Grid Wide (B69360, B69351.)
(Put grid up-side down if cycler does not accept the grid, e.g. ABI 7500, 7300 Fast & regular, Roche 480).
2. Slide 8-tube-strip into the cap holes.
3. Apply reaction component to the wells, individually close the tubes and position in the cycler.

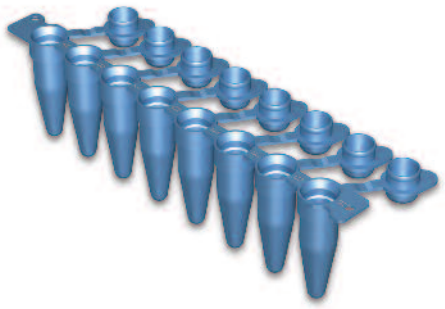
1.2.0 0.2 ml (q)PCR 8-tube strips with optical single attached caps

EU 0.2 ml Thin-wall 8-tube strip with single attached domed caps, Regular Profile

Can be used in most 0.2 ml regular block thermal cyclers (see tables on page 26 - 29).

Orderno	Description	Package Size
C78201	EU 0.2 ml Thin-wall 8-tube strip with attached caps, Regular Profile, natural	bag, 120

C78202	red	C78206	orange	C78210	black
C78203	blue	C78207	violet	C78211	natural, sterile
C78204	green	C78208	amber	C78212	SW colors
C78205	yellow	C78209	white		



Not Available in the USA, alternative for the USA: B79501 + B77101

EU 0.2 ml Thin-wall frosted 8-tube strip with single attached domed caps, Regular Profile

Can be used in most 0.2 ml regular block thermal cyclers (see tables on page 26 - 29).

Orderno	Description	Package Size
CF78201	EU 0.2 ml Thin-wall 8-tube strip with attached caps, Frosted, Regular Profile, natural	bag, 120

CF78202	red	CF78206	orange	CF78210	black
CF78203	blue	CF78207	violet	CF78211	natural, sterile
CF78204	green	CF78208	amber	CF78212	SW colors
CF78205	yellow	CF78209	white	CFA78201	natural, A-type material

Not available in the USA, alternative for the USA: B79501 + B77101

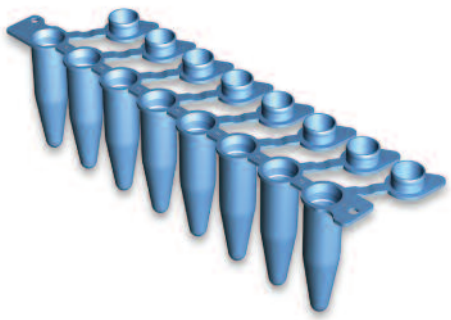
EU 0.2 ml Thin-wall 8-tube strip with single attached optical flat caps, High Profile

12.6 mm²

Can be used in most 0.2 ml regular block thermal and Real-Time cyclers
(see tables on page 26 - 29).

Orderno	Description	Package Size
B79201	EU 0.2 ml Thin-wall 8-tube strip with attached caps, High Profile, natural, stacked	bag, 120
B79201B	EU 0.2 ml Thin-wall 8-tube strip with attached caps, High Profile, natural	bag, 300

B79202	red	B79207	violet	B79202B	red	B79207B	violet
B79203	blue	B79208	amber	B79203B	blue	B79208B	amber
B79204	green	B79209	white	B79204B	green	B79209B	white
B79205	yellow	B79210	black	B79205B	yellow	B79210B	black
B79206	orange	B79211	natural, sterile	B79206B	orange	B79211B	natural, sterile



Not available in the USA, alternative for the USA: B79501 + B77101

1.2.1 0.2 ml (q)PCR 12-tube strips, Regular Profile

EU 0.2 ml Light frosted thin-wall 12-tube strip extra robust, (Regular Profile)

White

Fits almost all cycler models and qPCR cycler models which accept regular profile products. (e.g. ABI, Bio-Rad, Eppendorf, Agilent-Stratagene) See Cycler to Product charts (see tables on page 26 - 29) Closure can be accomplished with any EU 8 or 12-cap strip. For qPCR use B57821 cap strips. ABI compatible.

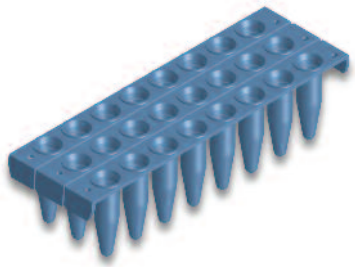
Orderno	Description	Package Size
B56601	EU 0.2ml Thin-wall 12-tube strip, Extra Robust, Regular Profile, Light Frosted, natural	.....bag, 80
B56601L	EU 0.2ml Thin-wall 12-tube strip, ER, RP, LF, positioned in grid, Laser Coded, natural	..10 grids hold 80 strips

B56602	red	B56606	orange	B56610	black
B56603	blue	B56607	violet	B56611	natural, sterile
B56604	green	B56608	amber		
B56605	yellow	B56609	white		

1.2.2 24 Well plates, 0.2 ml, (q)PCR, Regular Profile, semi skirted

EU Semi-skirted (q)PCR thin-wall 24 x 0.2 ml light frosted plate, Regular Profile

White



These EU 24 well regular profile plates are semi-skirted and designed for qPCR applications. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Real-Time thermal cyclers (see tables on page 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid.(p 34)

Orderno	Description	Package Size
B50240	EU 24 x 0.2 ml Thin-wall plate Semi Skirted, Regular Profile, Light Frosted, natural	.....100 plates
B50240L	EU 24 x 0.2 ml Thin-wall plate Semi Skirted, RP, Light Frosted, Laser Mark Coded, natural	.....100 plates
B50249L	EU 24 x 0.2 ml Thin-wall plate Semi Skirted, RP, Light Frosted, Laser Mark Coded, white	.....100 plates

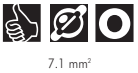
B50242	red	B50246	orange	B50250	black
B50243	blue	B50247	violet	B50251	natural, sterile
B50244	green	B50248	amber		
B50245	yellow	B50249	white		

Hint: Fits ABI 7300, 7500, 2400, 2700, 2720 cyclers, 9700 , Bio-Rad, Eppendorf and others.
Excellent for qPCR

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Low Profile 24 well plates (0.1 ml) see page 54. For 8-Cap Strips see page 42 - 43.

I.2.3 (q)PCR cap-strips

EU Robust indented flat 8 cap-strip



For qPCR optimized signals use B57801, EU Wide Optical 8-Cap Strip.
For closure of all BIOplastics type PCR tubes, strips and plates.

Orderno	Description	Package Size
B75701	EU Optical Thin-wall 8 cap-strip, natural	bag, 120
B75701B	EU Optical Thin-wall 8 cap-strip, natural	bag, 300

B75702	red	B75706	orange	B75710	black
B75703	blue	B75707	violet	B75711	natural, sterile
B75704	green	B75708	amber	B75712	SW colors
B75705	yellow	B75709	white		

EU Semi-domed thin-wall 8 cap-strip

For closure of all BIOplastics type PCR tubes, strips and plates.
For qPCR optimized signals use B57801, EU Wide Optical 8-Cap Strip.

Orderno	Description	Package Size
C79701	EU Semi-Domed Thin-wall 8 cap-strip, natural	bag, 120
C79701B	EU Semi-Domed Thin-wall 8 cap-strip, natural	bag, 300

C79702	red	C79708	amber	C79702B	red	C79708B	amber
C79703	blue	C79709	white	C79703B	blue	C79709B	whiter
C79704	green	C79710	black	C79704B	green	C79710B	black
C79705	yellow	C79711	natural, sterile	C79705B	yellow	C79711B	natural, sterile
C79706	orange	C79712	SW colors	C79706B	orange	C79712B	SW colors
C79707	violet			C79707B	violet		

EU Optical flat thin-wall 8 cap-strip

For closure of all BIOplastics type (q)PCR tubes, strips and plates. Can be use in all qPCR procedures. To prevent “finger touch” interference of the optical area B57801 EU Wide Optical 8-Cap Strip is offered as an alternative.

Orderno	Description	Package Size
B79701	EU Optical Thin-wall 8 cap-strip, natural	bag, 120
B79701B	EU Optical Thin-wall 8 cap-strip, natural	bag, 300

B79702	red	B79708	amber	B79702B	red	B79708B	amber
B79703	blue	B79709	white	B79703B	blue	B79709B	white
B79704	green	B79710	black	B79704B	green	B79710B	black
B79705	yellow	B79711	natural, sterile	B79705B	yellow	B79711B	natural, sterile
B79706	orange	B79712	SW colors	B79706B	orange	B79712B	SW colors
B79707	violet			B79707B	violet		

I.2.3 (q)PCR cap-strips

EU Optical wide area 8-cap strip robust with indented flat cap

Optimized for qPCR applications. Indented cap prevents "finger touch" signal interference.
For closure of all BIOplastics type (q)PCR tubes, strips and plates.

Orderno	Description	Package Size
B57801	EU Optical Wide 8 cap-strip,with indented flat cap, natural	bag, 120
B57801B	EU Optical Wide 8 cap-strip,with indented flat cap, natural	bag, 300
B57811	EU Optical Wide 8 cap-strip,with indented flat cap, natural, sterile	bag, 120

EU 8-Single attachable optical wide area indented cap

For closure of (q)PCR 8-tube strips type B77001(LP) and B77101(RP)

Orderno	Description	Package Size
B79501	EU 8-Single attachable Optical Wide indented cap, natural	bag, 120

EU Optical wide area 12-cap strip robust with wide Indented flat cap

Optimized for qPCR applications. Indented cap prevents "finger touch" signal interference.
For closure of all BIOplastics type (q)PCR tubes, strips and plates.

Orderno	Description	Package Size
B57821	EU Optical Wide 12 cap-strip, robust with wide indented flat cap, natural	bag, 120
B57821B	EU Optical Wide 12 cap-strip, robust with wide indented flat cap, natural	bag, 200
B57831	EU Optical Wide 12 cap-strip, robust with wide indented flat cap, natural, sterile	bag, 120
B57831B	EU Optical Wide 12 cap-strip, robust with wide indented flat cap, natural, sterile	bag, 200

EU Robust indented flat 12 cap-strip

For qPCR optimized signals use B57821, EU Wide Optical 12-Cap Strip. For closure of all BIOplastics type PCR tubes, strips and plates. Indented cap prevents "finger touch".

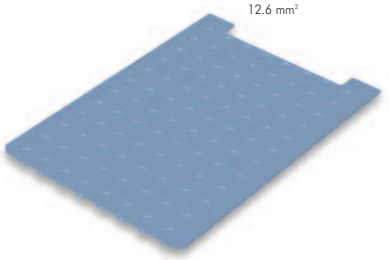
Orderno	Description	Package Size
B56501	EU Robust indented flat 12 cap-strip, natural	bag, 80
B56501B	EU Robust indented flat 12 cap-strip, natural	bag, 200

B56502	red	B56506	orange	B56510	black
B56503	blue	B56507	violet	B56511	natural, sterile
B56504	green	B56508	amber	B56512	SW colors
B56505	yellow	B56509	white		

I.2.4 (q)PCR cap-plates, cutable

EU Optical wide area cap plate 96 format with indented flat caps

12.6 mm²

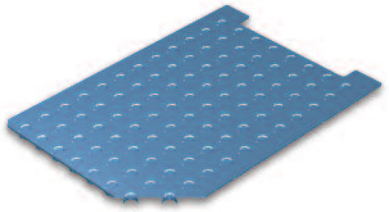


Optimized for qPCR applications. Indented cap prevents "finger touch" signal interference. For closure of all BIOplastics type (q)PCR tubes, strips and plates as well as for BIOplastics Titer dilution and (cryo) storage tubes. Easy to cut by scissor to required format.

Orderno	Description	Package Size
B57601	EU Optical Wide cap-plate 96 format, with indented flat cap, cutable, natural	.25 plates
B57611	EU Optical Wide cap-plate 96 format, with indented flat cap, cutable, natural, sterile	.25 plates

EU Robust indented flat cap plate 96 format

7.1 mm²

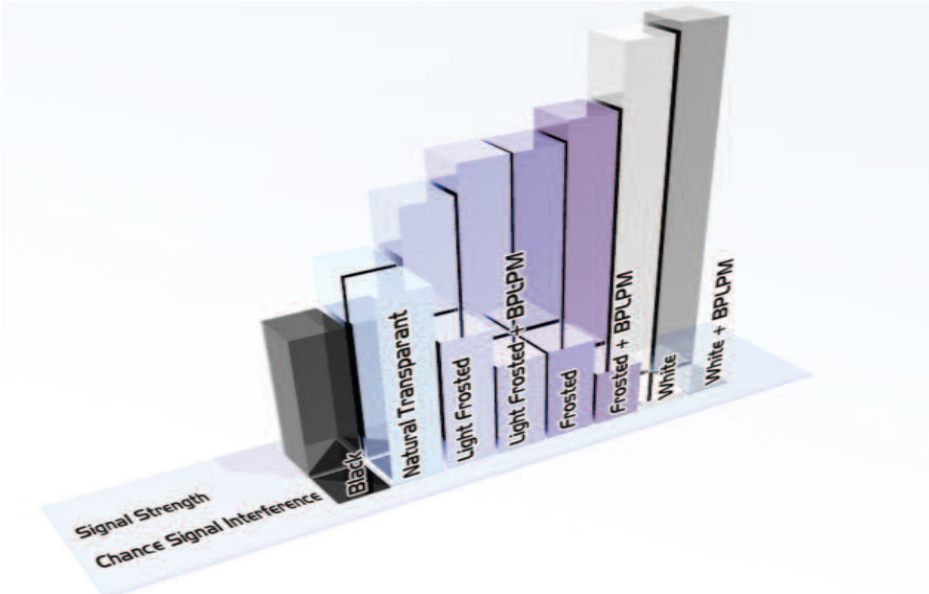


For closure of all BIOplastics type PCR tubes, strips and plates as well as for BIOplastics Titer dilution and (cryo) storage tubes. Indented cap prevents "finger touch" interference. For qPCR optimized signals use B57601, EU Wide Optical 96-Cap Plate. Can be cut to required size.

Orderno	Description	Package Size
B57501	EU Robust indented flat cap plate 96 format, natural	.25 plates

B57502	red	B57506	orange	B57510	black
B57503	blue	B57507	violet	B57511	natural, sterile
B57504	green	B57508	amber	B57512	SW colors
B57505	yellow	B57509	white		

For seals see page 64



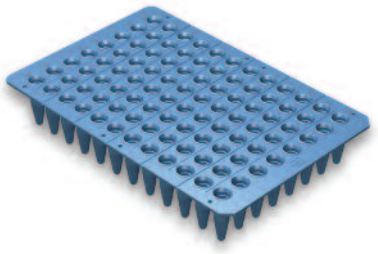
Comparison of Real-Time signals when using, black, natural, frosted and white BIOplastics (q)PCR products.
Signal Strength column: provide absolute Signal to noise ratios.
Signal Interference column: probability of Signal interference of the (polluted) cycler block.

PRODUCT TYPE	SIGNAL STRENGTH	Signal Interference PROBABILITY (Block pollution and/or condition)
Natural Transparent	100	100
Light Frosted	125	70
Light Frosted + BPLPM	140	50
Frosted	140	50
Frosted + BPLPM	150	30
White	180	< 2
White + BPLPM	185	< 1

1.3.0 Non-skirted 96 x 0.2 ml (q)PCR plates, Regular Profile

EU Non-skirted 96 x 0.2 ml thin-wall (q)PCR plate, Regular Profile


White



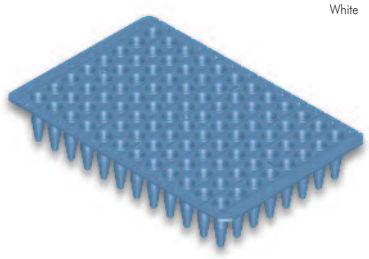
These EU 96 well regular profile plates are non-skirted. Plates can be easily cut into 16, 24, 32 or 48-well pieces. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Real-Time thermal cyclers (see tables on page 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid. (p 34)

Orderno	Description	Package Size
B70501	EU 96 x 0.2 ml Thin-wall plate, Regular Profile, natural	25 plates

B70502	red	B70506	orange	B70510	black
B70503	blue	B70507	violet	B70511	natural, sterile
B70504	green	B70508	amber	B70512	SW colors
B70505	yellow	B70509	white	BA70501	natural, A-type material

EU Non-skirted light frosted 96 x 0.2 ml thin-wall (q)PCR plate, breakable at 4°C, Regular Profile

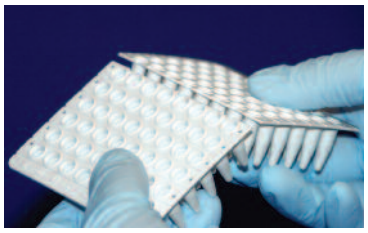

White



These EU 96 well regular profile plates are non-skirted and designed for qPCR applications. Plates can be easily cut and are breakable at 4°C. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Real-Time thermal cyclers (see tables on page 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid. (p 34) ABI compatible.

Orderno	Description	Package Size
B50501	EU Non-skirted 96 x 0.2 ml Thin-wall plate, RP, Light Frosted, natural	25 plates
B50501L	EU Non-skirted 96 x 0.2 ml Thin-wall plate, RP, Light Frosted, Laser Mark Coded, natural	25 plates
B50509	EU Non-skirted 96 x 0.2 ml Thin-wall plate, RP, white	25 plates
B50509L	EU Non-skirted 96 x 0.2 ml Thin-wall plate, RP, Laser Mark Coded, white	25 plates

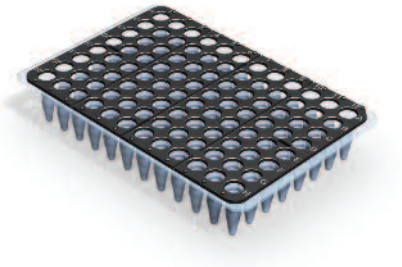
Colored plates are available on request.



Hint: Fits ABI 7300, 7500, 7900* non fast cyclers, 9700 , ABI Sequencers, Bio-Rad, Eppendorf (*use specific adaptor mentioned on page 59). Excellent for qPCR.

Plates can be color coded by using wide area grids

Wide area tube support grid



Orderno	Description	Package Size
B69351	Wide version Pre-Post Tube support grid, can hold either EU Plates or tubes (strips), natural	8 grids

B69352	red	B69354	green	B69359	white
B69353	blue	B69355	yellow	B69360	black

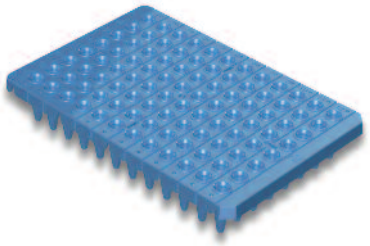
See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Low Profile 96 well (0.1 ml) non-skirted plates see page 55.

I.3.I Semi-skirted 96 X 0.2 ml (q)PCR plates, Regular Profile

EU Semi-skirted 96 x 0.2 ml thin-wall (q)PCR plate, cutable and breakable (4°C), Regular Profile

White

These EU 96 well regular profile plates are semi-skirted and designed for qPCR applications. Plates can be easily cut in sections of 3 rows and are breakable at 4°C. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Real-Time thermal cyclers (see tables on page 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid.



Orderno	Description	Package Size
B50651	EU 96 x 0.2 ml Thin-wall plate, Regular Profile, Light Frosted, cutable, natural	.25 plates
B50651L	EU 96 x 0.2 ml Thin-wall plate, Regular Profile, Light Frosted, Laser Mark Coded, natural	.25 plates
B50659L	EU 96 x 0.2 ml Thin-wall plate, Regular Profile, Light Frosted, Laser Mark Coded, white	.25 plates

B50652	red	B50656	orange	B50660	black
B50653	blue	B50657	violet	B50661	natural, sterile
B50654	green	B50658	amber		
B50655	yellow	B50659	white		

Hint: Fits ABI 7300, 7500, non fast cyclers, 9700 , Bio-Rad, Eppendorf. Excellent for qPCR

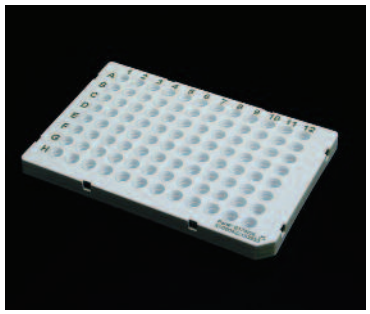
EU Semi-skirted 96 x 0.2 ml thin-wall (q)PCR plate (RP), extra robust and rigid

White

These EU 96 well plates have a very rigid, extra stabilized frame, and a semi skirt that makes them suited for robotic handling. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Real-Time thermal cyclers (see tables on page 26 - 29)

Orderno	Description	Package Size
B70651	EU 96 x 0.2 ml Thin-wall Semi Skirted plate, Regular Profile, extra robust, natural	.25 plates

B70652	red	B70656	orange	B70660	black
B70653	blue	B70657	violet	B70661	natural, sterile
B70654	green	B70658	amber	B70662	SW color
B70655	yellow	B70659	white		



Laser Mark Coded plate, white

Hint: Plate is very rigid and very well suited for Robotic Applications

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Low Profile 96 well (0.1 ml) semi-skirted plates see page 57.

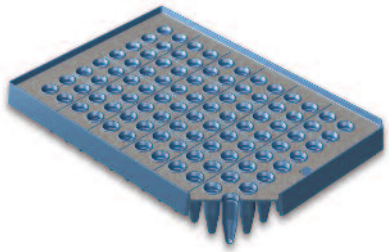
I.3.2 Sub-skirted 96 x 0.2 ml (q)PCR plates, ABI compatible

EU Frosted sub-skirted 96 x 0.2 ml thin-wall (q)PCR plate, ABI compatible

White

These EU 96 well plates are a superior quality and price alternative designed to fit any Applied Biosystems regular or Real-Time PCR thermal cycler as well as ABI sequencers. They have a very rigid, extra stabilized frame and an elevated skirt. They are suited for both automatic loading as well as robotic handling. To improve Real-Time PCR signal yields, the tubes in this 96-well plate are frosted. For more multi-purpose alternatives see Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65).
These ABI compatible plates are also available in Laser Mark Coded and barcode labelled versions.
Also available A-type material (info on page 7).

Orderno	Description	Package Size
AB17500	ABI Compatible, EU 96 x 0.2 ml Thin-wall plate, natural	25 plates
AB17500L	ABI Compatible, EU 96 x 0.2 ml Thin-wall platel, Laser Mark Coded, natural	25 plates
AB17509L	ABI Compatible, EU 96 x 0.2 ml Thin-wall plate, Laser Mark Coded, white	25 plates
BB17500L	ABI Compatible, EU 96 x 0.2 ml Thin-wall plate, Laser Mark Coded, barcoded, natural	25 plates
BB17509L	ABI Compatible, EU 96 x 0.2 ml Thin-wall plate, Laser Mark Coded, barcoded, white	25 plates



AB17502	red	AB17508	amber
AB17503	blue	AB17509	white
AB17504	green	AB17510	black
AB17505	yellow	AB17511	natural, sterile
AB17506	orange	AB17512	SW colors
AB17507	violet	ABA17500	natural, A-type

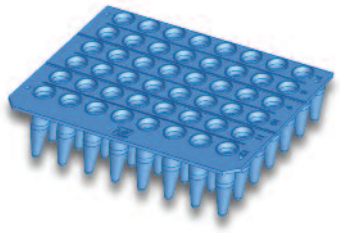
I.3.3 Non-skirted 48 x 0.2 ml (q)PCR plates, Regular Profile

EU Non-skirted 48 x 0.2 ml thin-wall (q)PCR Plate

White

Easily cutable into 16 or 24-well pieces. Can be used in 0.2 ml block regular and Real-Time thermal cycler (fits nearly all 0.2 ml block thermal cyclers). Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65).

Orderno	Description	Package Size
B71501	ABI Compatible, EU 48 x 0.2 ml Thin-wall plate, natural	50 plates



B71502	red	B71506	orange
B71503	blue	B71507	violet
B71504	green	B71508	amber
B71505	yellow	B71509	white

B71510	black
B71511	natural, sterile

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Low Profile 96 well (0.1 ml) Sub-skirted plates see page 58.
For Low Profile 48 well (0.1 ml) Semi-skirted plates see page 54.

1.4.0 Low profile (q)PCR single tubes (0.1 ml)

EU 0.2 ml Thin-wall tube with optical indented wide area cap, Low Profile (0.1 ml)

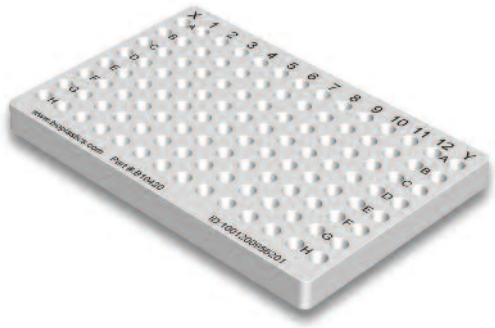
12.6 mm²

Fits almost all cycler models and qPCR (fast) cycler models which accept low profile products. (ABI Veriti*(fast), Roche 480*, Bio-Rad, Eppendorf)(*requires specific adaptor) Can be used in most 0.2 ml Fast Cycler and Real-Time thermal cyclers (see tables on page 26 - 29).

Orderno	Description	Package Size
B77201	EU 0.2 ml Thin-wall tube, Low Profile, natural,	.....bag, 1000

B77202	red	B77206	orange	B77210	black
B77203	blue	B77207	violet	B77211	natural, sterile
B77204	green	B77208	amber		
B77205	yellow	B77209	white		

Hint: Fits ABI Veriti Fast, StepOne, StepOne plus, 7500 Fast, 7900*, Fast, 9800, Roche 480* (*with adaptor), Piko, CFX and many other cyclers.



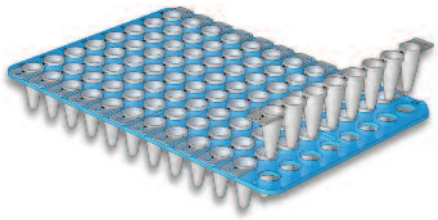
Multo Work Rack, for liquid handling produres and storage of single tubes, tubes strips or plates. See also page 103.

EU Adaptor1 Roche LC480 "Standard" for using low profile single tubes, low profile strips or low profile non-skirted (cutable) plates in LC480.

Tube support grid, make your own plate

Tube support grid holds plates, strips or individual tubes and is used as a carrier which can be placed in the thermal cycler, during the pre- and post cycling process.

Support grid: 11.3 cm (L) x 7.6 cm (W) x 0.15 cm (H)
4.48 inch (L) x 2.99 inch (W) x 0.06 inch (H)



Regular Area

(use with any product except "click on" strip-cap,and C7... tubes and C7....tube strips)

Orderno	Description	Package Size
B69301	Regular Pre-Post Tube support grid, can hold either EU Plates or tubes (strips), natural	..... 8 grids

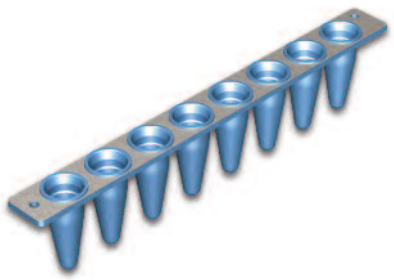
B69302	red	B69304	green	B69309	white
B69303	blue	B69305	yellow	B69310	black

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Regular Profile 0.2 ml (q)PCR tubes see page 32.

1.4.1 Low profile (q)PCR 8-tube strips (0.1 ml)

EU 0.2 ml Light frosted thin-wall 8-tube strip extra robust Low Profile (0.1 ml)

White



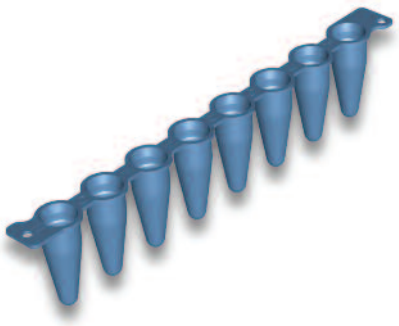
Fits almost all cycler models and qPCR (fast) cycler models which accept low profile products. (ABI*(fast), Roche 480*, Bio-Rad, Eppendorf)(*requires specific adaptor). See Cycler to Product charts (pages 26 - 29). Closure can be accomplished with any EU 8-cap strip.
For qPCR use B57801 or B79701 cap strips.

Orderno	Description	Package Size
B59901	EU 0.2ml Thin-wall 8-tube strip, Extra Robust, Low Profile, Light Frosted, natural	bag, 120
B59909	EU 0.2ml Thin-wall 8-tube strip, Extra Robust, Low Profile, Light Frosted, white	bag, 120
B59909L	EU 0.2ml Thin-wall 8-tube strip, ER, LP, Light Frosted, white, Laser Mark Coded	10 grids hold 120 strips

Hint: Fits ABI Veriti Fast, StepOne, StepOne plus, 7500* Fast, 9800, Roche 480* (*with adaptor, Piko, CFX and many other cyclers)
For adaptors see page 59.

EU 0.2 ml Light frosted thin-wall 8-tube strip, Low Profile (0.1 ml)

White



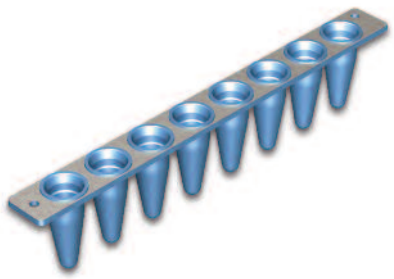
Fits almost all cycler models and qPCR (fast) cycler models which accept low profile products. (ABI*(fast), Roche 480*, Bio-Rad, Eppendorf)(*requires specific adaptor). See Cycler to Product charts (see tables on pages 26 - 29). This strip can be used in combination with the 8-Single attachable Indented Cap strip. Closure can be accomplished with any EU 8-cap strip.
For qPCR use B57801, B79701 cap strips or B79501 EU 8-Single attachable Indented Cap.

Orderno	Description	Package Size
B77001	EU 0.2ml Thin-wall 8-tube strip, Low Profile, Light Frosted, natural	bag, 120
B77009	EU 0.2ml Thin-wall 8-tube strip, Extra Robust, Low Profile , Light Frosted white	bag, 120
B77009L	EU 0.2ml Thin-wall 8-tube strip, ER, (LP), Light Frosted, white, Laser Mark Coded	10 grids hold 120 strips

Hint: Fits ABI Veriti Fast, StepOne, StepOne plus, 7500* Fast, 9800, Roche 480* (*with adaptor, Piko, CFX and many other cyclers). For adaptors see page 59.

EU 0.2 ml Thin-wall 8-tube strip extra robust Low Profile (0.1 ml)

White



Fits almost all cycler models and qPCR (fast) cycler models which accept low profile products. (ABI*(fast), Roche 480*, Bio-Rad, Eppendorf)(*requires specific adaptor) See Cycler to Product charts (pages 26 - 29). Closure can be accomplished with any EU 8-cap strip.
For qPCR use B57801 or B79701 cap strips.

Orderno	Description	Package Size
B72711	EU 0.2 ml Thin-wall 8-tube strip, Low Profile, natural	bag, 120

B72712	red	B72716	orange	B72720	black
B72713	blue	B72717	violet	B72721	natural, sterile
B72714	green	B72718	amber		
B72715	yellow	B72719	white		

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Regular Profile 8-tube-strips (0.2 ml) see page 36 - 37. For 8-Cap Strips see page 42 - 43.

I.4.1 Low profile (q)PCR 8-tube strips (0.1 ml)

EU 0.2 ml Thin-wall 8-tube strip, Low Profile (0.1 ml)

White

Fits almost all cycler models and qPCR (fast) cycler models which accept low profile products. (Roche 480*, Bio-Rad, Eppendorf)(*requires specific adaptor). See Cycler to Product charts (pages 26 - 29). Closure can be accomplished with any EU 8-cap strip.
For qPCR use B57801 or B79701 cap strips.

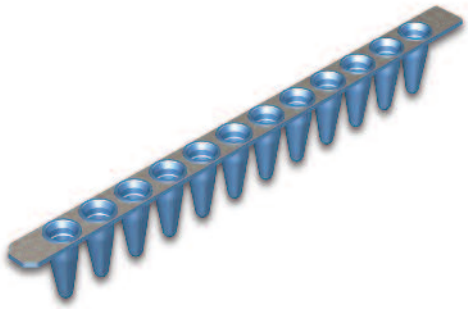
Orderno	Description	Package Size
B79601	EU 0.2 ml Thin-wall 8-tube strip, Low Profile, natural	bag, 120

B79602	red	B79606	orange	B79610	black
B79603	blue	B79607	violet	B79611	natural sterile
B79604	green	B79608	amber	B79612	SW colors
B79605	yellow	B79609	white		

I.4.2 Low profile (q)PCR 12-tube strips (0.1 ml)

EU Light frosted 0.2 ml thin-wall 12-tube strip extra robust Low Profile (0.1 ml)

White



Fits almost all cycler models and qPCR (fast) cycler models which accept low profile products. (ABI*(fast), Roche 480*, Bio-Rad, Eppendorf)(*requires specific adaptor). See Cycler to Product charts (pages 26 - 29). Closure can be accomplished with any EU 12-cap strip (B56501).
For qPCR use B57821 cap strip.

Orderno	Description	Package Size
B76601	EU 0.2 ml Thin-wall 12-tube strip, Light Frosted, extra robust, Low Profile, natural	bag, 80

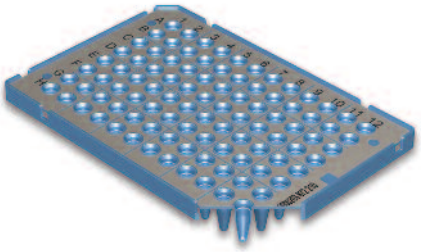
B76602	red	B76606	orange	B76610	black
B76603	blue	B76607	violet	B76611	natural, sterile
B76604	green	B76608	amber		
B76605	yellow	B76609	white		

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Regular Profile 8-tube-strips (0.2 ml) see page 36 - 37. For 8-Cap Strips see page 42 - 43.
For Regular Profile 12-tube-strips (0.2 ml) see page 41. For 12-Cap Strips see page 43.

I.4.3 Differences between Non, Semi, Sub and Full Skirted plates

Non-nesting plates

All BIOplastics plates are absolutely flat which allows easy pipetting as well as easy positioning and removal from cyclers. Plates do not nest or stick together.
This is appreciated by those who dislike putting time and effort into de-stacking plates as well as those who require liquid handling automation without de-stacking failures. Some plates are cutable, some are breakable and most of them have 12 centered and 12 non-centered holes. This gives you the ability to color code a plate by clicking a BIOplastics grid to the plate holes. Plates are available in Low Profile (LP) and Regular Profile (RP) versions.
See page 20 for the difference in the height of LP, RP products.



Sub Skirted Laser coded plate.

Differences in plate skirts

With a wide variety of (q)PCR cyclers on the market today, the type of disposables a cycler accepts, and additional requirements form customers, it can be difficult to accommodate these demands. BIOplastics offers solutions.
For example: if a cycler only accepts plates and you do not like to work with plates then opt for one of the BIOplastics adaptor solutions which enables the use of single tubes and strips in cyclers which normally only accept plates. (See page 59)

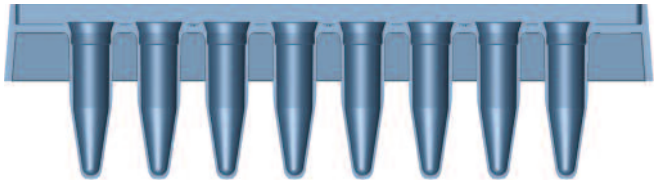
Plates are available in different heights as well as with different skirts. Find below cross sections of different plates and comments:

RP — Non skirted / Regular Profile

These types of plates have the widest application range and can be easily cut.
They fit most cyclers.

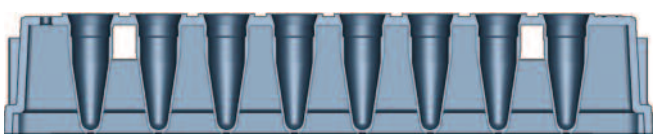
RP — Semi skirted / Regular Profile

These types of plates have a semi skirt.
Can be used in robotics and the skirt gives extra stability. Some BIOplastics models can also be cut.
Fits most cyclers but not as many as skirted plates.



RP — Sub skirted / Regular Profile

These types of plates have a sub skirt.
Can be used in robotics and the sub-skirt gives extra stability.
Fits mostly ABI cyclers and a few other cyclers



LP — Full skirted / Low Profile

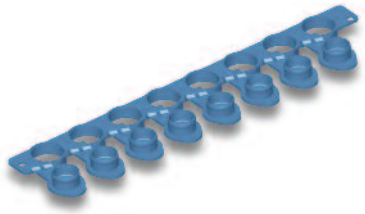
These types of plates have a full skirt.
Can be used in robotics and the plate is stable.
Typically used in liquid handling procedures
Fits a limited number of cyclers

I.4.4 Low profile (q)PCR 8-tube strips with optical single attached caps (0.1 ml)

Component I

12.6 mm²

EU 8-Single attachable optical wide indented cap



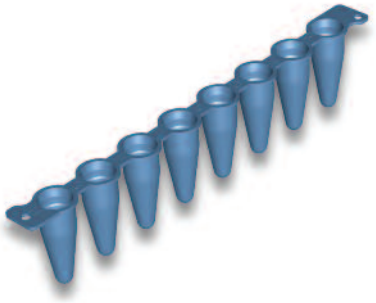
For closure of (q)PCR 8-tube strips type B77001or B77101.

Orderno	Description	Package Size
B79501	EU 8-Single attachable Optical Wide indented cap, natural	.bag, 120

Component 2 for creating Low Profile thin-wall 8-tube strip with single attached cap

White

EU 0.2 ml Light frosted thin-wall 8-tube strip, Low Profile (0.1 ml)



Fits almost all cycler models and qPCR (fast) cycler models which accept low profile products. (ABI*(fast), Roche 480*, Bio-Rad, Eppendorf)(*requires specific adaptor).
See Cycler to Product charts (pages 26 - 29).

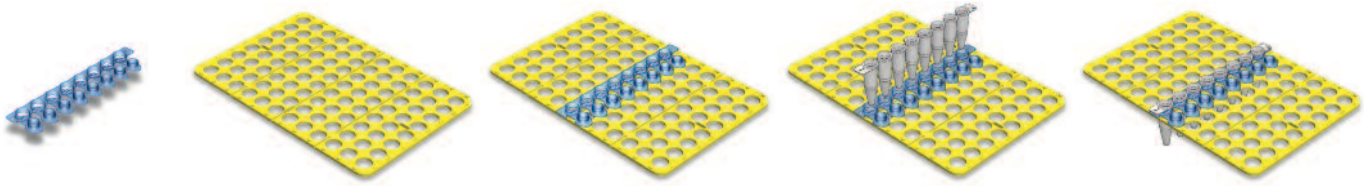
Orderno	Description	Package Size
B77001	EU 0.2ml Thin-wall 8-tube strip, Low Profile, Light Frosted, natural	.bag, 120
B77009	EU 0.2ml Thin-wall 8-tube strip, Low Profile, Light Frosted, white	.bag, 120
B77009L	EU 0.2ml Thin-wall 8-tube strip, Low Profile, LF, white, Laser Mark Coded	.10 grids hold 120 strips

Hint: Use this strip in white in conjunction with the 8 single attachable Optical wide area cap to get highest signals and low possible cross contamination in qPCR procedures. Fits ABI fast, StepOne, StepOne Plus, as well as Roche* 480 cyclers. *requires specific BIOplastics adaptor (see page 59)

Advised work protocol for component I + 2

creating Low Profile thin-wall 8-tube strip with single attached cap

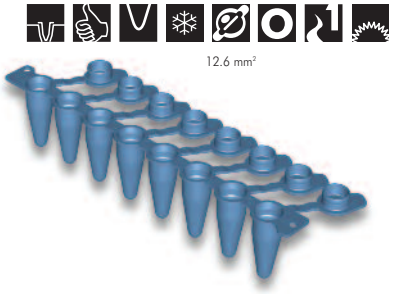
1. position single attachable cap-strip in Tube Support Grid Wide (B69360, B69351).
   (put grid up-side down if cycler does not accept the grid, e.g. ABI 7500, 7300 Fast & regular, Roche 480).
2. slide 8-tube-strip into the cap holes.
3. apply reaction component to the wells, individually close the tubes and position in the cycler.



See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Regular Profile 8 tube-strips (0.1 ml) with attached caps see page 38 - 40.

I.4.4 Low profile (q)PCR 8-tube strips with optical single attached caps (0.1 ml)

EU 0.2 ml Thin-wall 8-tube strip with single attached optical wide area indented cap, Low Profile (0.1 ml)

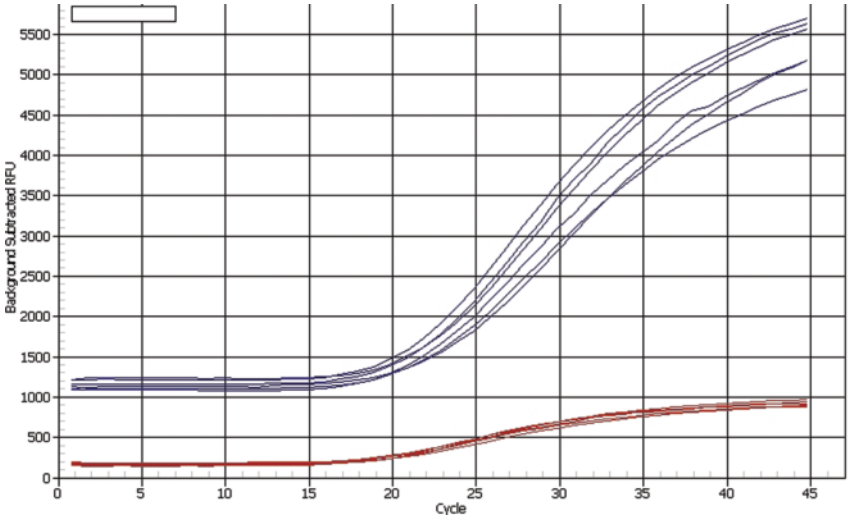


Fits almost all cycler models and qPCR (fast) cycler models which accept low profile products. (ABI*(fast), Roche 480*, Bio-Rad, Eppendorf)(*some models requires a specific adaptor).
See Cycler to Product charts (pages 26 - 29).

Orderno	Description	Package Size
B72811	EU 0.2 ml Thin-wall 8-tube strip with single attached optical caps, LP, natural	bag, 120

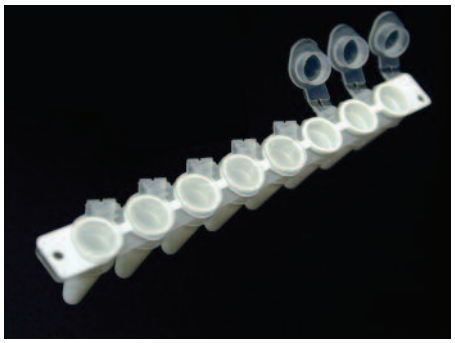
Not available in the USA, alternative for the USA: B79501 + B77001

Hint: Fits ABI Veriti Fast, StepOne, StepOne plus, 7500* Fast, 9800, Roche 480* (*with adaptor, Piko, CFX and many other cyclers)
For adaptors see page 51.



White

Natural



"Click on" Caps enable maximum signal to noise ratios on white strips and individual closure of the tubes with the optical indented caps

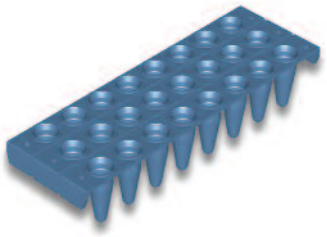
Comparison of Real-Time signal to noise ratios when using natural or white BIOplastics (q)PCR products.

Tube Support Grids for color coding plates or composing tubes and tube strips in a fixed format.

1.5.0 Low profile 24 & 48 (q)PCR plates (0.1 ml)

EU Semi-skirted light frosted 24 x 0.2 ml (q)PCR thin-wall plate, Low Profile (0.1 ml)

White



These EU 24 well low profile plates are semi-skirted and designed for qPCR applications. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Real-Time Fast cyclers (see tables on page 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid (p 34).

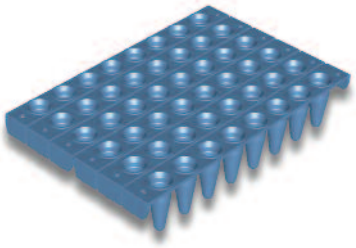
Orderno	Description	Package Size
B50340	EU 24 x 0.2 ml Thin-wall plate Semi-skirted, LP, LF, natural	100 plates
B50340L	EU 24 x 0.2 ml Thin-wall plate Semi-skirted, LP, LF, Laser Mark Coded, natural	100 plates
B50349L	EU 24 x 0.2 ml Thin-wall plate Semi-skirted, LP, LF, Laser Mark Coded, white	100 plates

B50342	red	B50346	orange	B50350	black
B50343	blue	B50347	violet	B50351	natural, sterile
B50344	green	B50348	amber		
B50345	yellow	B50349	white		

Hint: Fits ABI Veriti Fast, StepOne, StepOne Plus, 9800, Finnzymes Piko and others.

EU Semi-skirted light frosted 48 x 0.2 ml (q)PCR thin-wall plate, Low Profile (0.1 ml)

White



These EU 48 well low profile plates are semi-skirted and designed for qPCR applications. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in many 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29) Plate is robust, flat and can be color coded using a Pre-Post Tube support grid (p.34).

Orderno	Description	Package Size
B71601	EU 48 x 0.2 ml Thin-wall plate Semi-skirted, LP, LF, natural	50 plates
B71601L	EU 48 x 0.2 ml Thin-wall plate Semi-skirted, LP, LF, Laser Mark Coded, natural	50 plates
B71609L	EU 24 x 0.2 ml Thin-wall plate Semi-skirted, LP, LF, Laser Mark Coded, white	50 plates

B71602	red	B71606	orange	B71610	black
B71603	blue	B71607	violet	B71611	natural, sterile
B71604	green	B71608	amber		
B71605	yellow	B71609	white		

Hint: Fits ABI Veriti Fast, StepOne, StepOne Plus, 9800 and others.

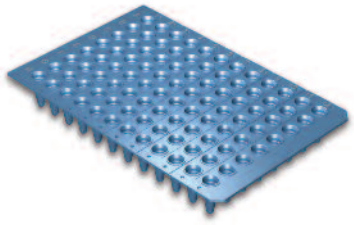
Fits ABI Veriti Fast, StepOne, StepOne Plus, 9800 and others.

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Regular Profile 96 well Non-skirted plates see page 45.
For Regular Profile 48 well Non-skirted plates see page 47.
For Regular Profile 24 well Semi-skirted plates see page 41.

1.5.1 Low profile non-skirted 96 x 0.2 ml (q)PCR plates (0.1 ml)

EU Non-skirted 96 x 0.2 ml thin-wall (q)PCR plate, Low Profile, (0.1 ml)

White



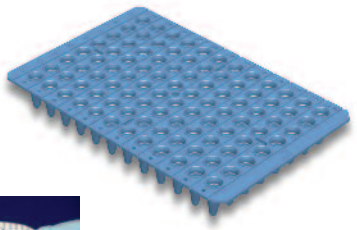
This EU 96 well low profile plate is non-skirted. Plates can be easily cut into 16, 24, 32 or 48-well pieces. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in many 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid (p.34).

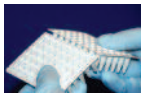
Orderno	Description	Package Size
B60101	EU 96 x 0.2 ml Thin-wall plate, Non-skirted, Low Profile, natural	25 plates
B60101L	EU 96 x 0.2 ml Thin-wall plate, Non-skirted, Low Profile, Laser Mark Coded, natural	25 plates
B60109L	EU 96 x 0.2 ml Thin-wall plate, Non-skirted, Low Profile, Laser Mark Coded, white	25 plates

B60102	red	B60106	orange	B60110	black
B60103	blue	B60107	violet	B60111	natural, sterile
B60104	green	B60108	amber	B60112	SW colors
B60105	yellow	B60109	white		

EU Non-skirted light frosted 96 x 0.2 ml thin-wall (q)PCR plate, breakable at 4°C, Low Profile (0.1 ml)

White





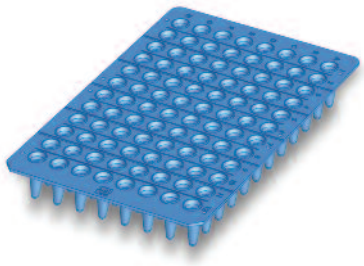
This EU 96 well low profile plate is non-skirted and designed for qPCR applications. Plates can be easily cut and are breakable at 4°C. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in many 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid (p.34).

Orderno	Description	Package Size
B50601	EU 96 x 0.2 ml Thin-wall plate, Non-skirted, LP, LF, natural	25 plates
B50601L	EU 96 x 0.2 ml Thin-wall plate, Non-skirted, LP, LF, Laser Mark Coded, natural	25 plates
B50609L	EU 96 x 0.2 ml Thin-wall plate, Non-skirted, LP, Laser Mark Coded, white	25 plates

Colored plates are available on request.

EU Non-skirted <u>frosted</u> 96 x 0.2 ml thin-wall (q)PCR plate, Low Profile (0.1 ml)

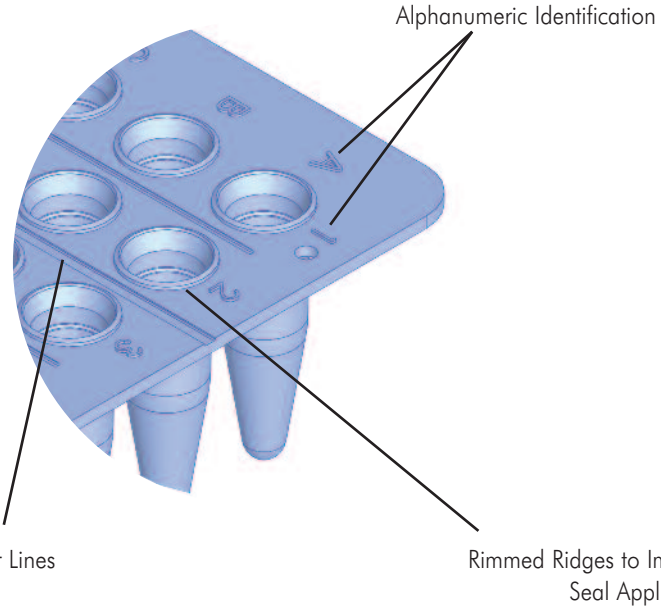
White

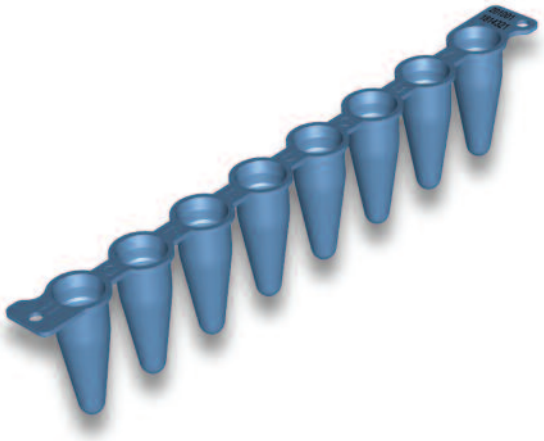


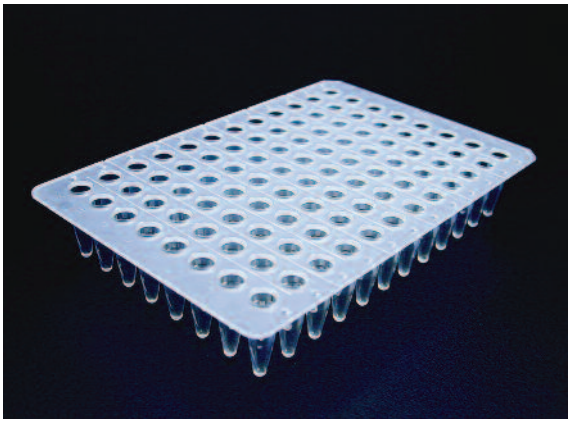
This plate has frosted tubes and can so be used in Real-Time applications without using other colored plates typically used for signal enhancement in Real-Time PCR procedures. Plates can easily be cut into 16, 24, 32 or 48-well pieces. Can be used in many 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29). Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65).

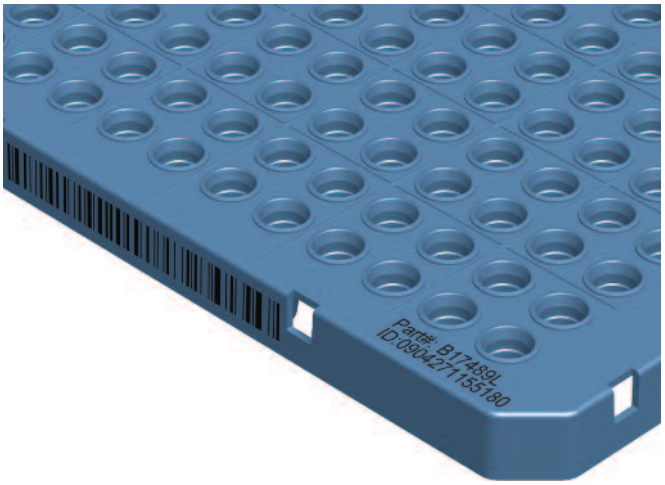
Orderno	Description	Package Size
AB70651	EU 96 x 0.2 ml Thin-wall plate, Non-skirted, LP, frosted, natural	25 plates
AB70651L	EU 96 x 0.2 ml Thin-wall plate, Non-skirted, LP, frosted, Laser Mark Coded, natural	25 plates
AB70659L	EU 96 x 0.2 ml Thin-wall plate, Non-skirted, LP, frosted, Laser Mark Coded, white	25 plates

AB70652	red	AB70656	orange	AB70660	black
AB70653	blue	AB70657	violet	AB70661	natural, sterile
AB70654	green	AB70658	amber		
AB70655	yellow	AB70659	white		







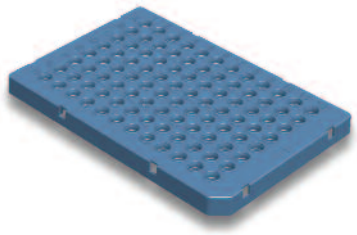


B70501, EU 96 x 0.2 ml Thin-wall plate, natural

1.5.2 Low profile semi-skirted 96 x 0.2 ml (q)PCR plates (0.1 ml)

EU Semi-skirted light frosted 96 x 0.2 ml thin-wall (q)PCR plate, Roche 480 compatible, Low Profile (0.1 ml)

White



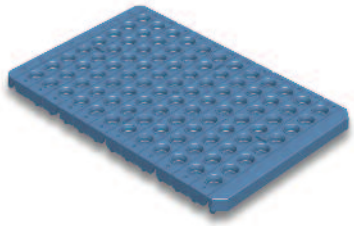
These EU 96 well low profile plates are semi-skirted and designed for qPCR applications and to fit Roche 480 cyclers with 96 well blocks. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). In addition to Roche 480 cyclers, these can be used in many 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29).

Orderno	Description	Package Size
B17480	EU Roche 480 96 x 0.2 ml Thin-wall plate, Semi-skirted, LP, LF, natural	25 plates
B17480L	EU Roche 480 96 x 0.2 ml Thin-wall plate, Semi-skirted, LP, LF, Laser Mark Coded, natural	25 plates
B17489	EU Roche 480 96 x 0.2 ml Thin-wall plate, Semi-skirted, LP, LF, white	25 plates
B17489L	EU Roche 480 96 x 0.2 ml Thin-wall plate, Semi-skirted, LP, LF, Laser Mark Coded, white	25 plates
BB17489L	EU Roche 480 96 x 0.2 ml Thin-wall plate, Semi-skirted, LP, LF, Laser Mark Barcoded, white	25 plates

For cutable plates and strips which fit Roche 480 cyclers in combination with BIOplastics Roche 480 adaptor (B79480) see low profile light frosted or white non skirted plates, 8-tube strips LP, 12-tube strips LP, low profile strips with attached caps (B72811) low profile single tubes.
For B79501 combined with B77001 or B77101 use adapor B79481.

EU Semi-skirted 96 x 0.2 ml thin-wall (q)PCR plate, cutable and breakable (4°C) Low Profile (0.1 ml)

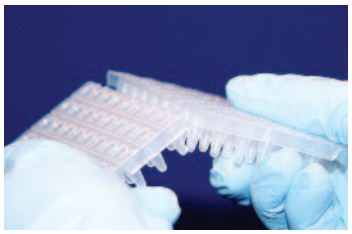
White



These EU 96 well low profile plates are semi-skirted and designed for qPCR applications. Plates can be easily cut in sections of 3 rows and are breakable at 4°C. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Fast Real-Time thermal cyclers (see tables on page 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid.

Orderno	Description	Package Size
B50751	EU 96 x 0.2 ml Thin-wall Semi-skirted plate, LP, Light Frosted, cutable, natural	25 plates
B50751L	EU 96 x 0.2 ml Thin-wall Semi-skirted plate, LP, Light Frosted, Laser Mark Coded, natural	25 plates
B50759L	EU 96 x 0.2 ml Thin-wall Semi-skirted plate, LP, Light Frosted, Laser Mark Coded, white	25 plates

B50752	red	B50756	orange	B50760	black
B50753	blue	B50757	violet	B50761	natural, sterile
B50754	green	B50758	amber		
B50755	yellow	B50759	white		



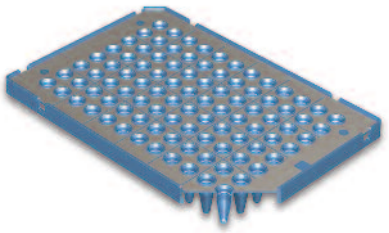
Hint: Fits ABI fast cyclers, StepOne Plus, Bio-Rad, Eppendorf and other. Excellent for qPCR.

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Regular Profile 96 well Semi-skirted and breakable plates see page 46.

I.5.3 Low profile sub-skirted 96 x 0.2 ml fast (q)PCR plates, ABI compatible (0.1 ml)

EU Frosted sub-skirted 96 x 0.2 ml thin-wall (q)PCR plate, ABI compatible, Low Profile (0.1 ml)

White



The plate has frosted tubes and can be used in Real-Time applications. The plate is designed to fit ABI 9800 and other "fast"cycler sample blocks (eg. 7500 fast, 7900 fast) and can also be used in many 0.2 ml block regular and Real-Time thermal cyclers (see tables on pages 26 - 29). The working volume for this plate is between 5 and 25 µl reaction mixtures. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65).

Orderno	Description	Package Size
AB19800	EU ABI Fast Compatible 96 x 0.2 ml Thin-wall plate, Frosted, natural	.25 plates
AB19800L	EU ABI Fast Compatible 96 x 0.2 ml Thin-wall plate, Frosted, Laser Mark Coded, natural	.25 plates
AB19809L	EU ABI Fast Compatible 96 x 0.2 ml Thin-wall plate, Frosted, Laser Mark Coded, white	.25 plates

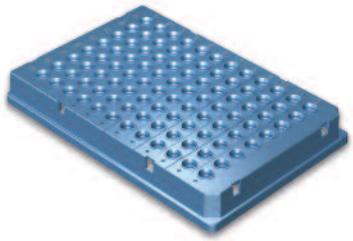
AB19802	red	AB19806	orange	AB19810	black
AB19803	blue	AB19807	violet	AB18011	natural, sterile
AB19804	green	AB19808	amber	AB18012	SW colors
AB19805	yellow	AB19809	white		

Hint: Fits All ABI Fast Cyclers.

I.5.4 Low profile full-skirted 96 x 0.2 ml (q)PCR plates (0.1 ml)

EU Skirted 96 x 0.2 ml thin-wall (q)PCR plate, flat, robust, stackable and robotic friendly

White



These EU 96 well low profile plates are rigid, flat and skirted. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in a number of 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29) Plates are robust, flat, stackable and can be color coded using a Pre-Post Tube support grid (p.34).

Orderno	Description	Package Size
B70671	EU 96 x 0.2 ml Thin-wall plate, Full-skirted, natural,	.25 plates
B70671L	EU 96 x 0.2 ml Thin-wall plate, Full-skirted, Laser Mark Coded, natural	.25 plates
B70679L	EU 96 x 0.2 ml Thin-wall plate, Full-skirted, Laser Mark Coded, white	.25 plates

B70672	red	B70676	orange	B70680	black
B70673	blue	B70677	violet	B70681	natural, sterile
B70674	green	B70678	amber	B70682	SW colors
B70675	yellow	B70679	white		

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Regular Profile 96 well sub-skirted ABI plates see page 47.

I.6.0 EU Adaptors for Roche and ABI (fast) cyclers

EU Adaptors for Roche 480, ABI 7500 fast, 7900 and 7900 fast cyclers

BIOplastics manufactures and offers the widest range (q)PCR disposables and offers products for ALL BRANDS of PCR and qPCR cyclers. Some plates, strips and tubes are designed for specific cyclers while a number of products are smartly designed to allow full interchangeability between products and cyclers. The EU adaptors are used on specific qPCR instruments and enable users to select their preferred vessel type instead of being forced to use the cycler manufacturers selected vessel type. All options are offered by BIOplastics.
Once you have selected your preferred vessel type, select, the corresponding EU adaptor, and benefit the reproducible and interchangeability of results while reducing the number of vessel types and vendors. EU adaptors should be used whenever low profile versions or single tubes, 8-tube strips, 8-tube strips with single attached caps, 8-tube strips with “click on” attachable single cap strips, 12-tube strips, or cut-able non skirted (q)PCR plates for use in Roche 480, ABI 7500 Fast, ABI 7900 Fast and ABI 7900 cyclers. BIOplastics offers adaptors to allow the use of single tubes, tube strips and cutable plates.

EU Adaptor Roche LC480 "Standard"

For use with low profile single tubes, low profile 8-tube strips, low profile 12-tube strips, low profile strips with attached caps and low profile non skirted plates. Cannot be use with B77001-B77009 8-tube strip combined with B79501 EU 8-Single attachable Indented Cap.

EU Adaptor Roche LC480 "Wide"

For use with low profile strips and low profile non skirted plates. Also required when using B77001-B77009 8-tube strip combined with B79501 EU 8-Single attachable Indented Cap.

EU Adaptor ABI 7500 fast cycler "Standard", EU Adaptor ABI 7900 fast cycler "Standard"

For use with low profile single tubes, low profile 8-tube strips, low profile 12-tube strips, low profile strips with attached caps and low profile non skirted plates. Cannot be used with B77001-B77009 8-tube strip combined with B79501 EU 8-Single attachable Indented Cap.

EU Adaptor ABI 7500 fast cycler "Wide", EU Adaptor ABI 7900 fast cycler "Wide"

For use with low profile strips and low profile non skirted plates. Also required when using B77001-B77009 8-tube strip combined with B79501 EU 8-Single attachable Indented Cap.

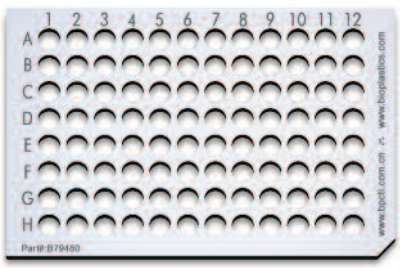
EU Adaptor ABI 7900 cycler "Standard"

For use with regular profile single tubes(B77301), regular profile 8-tube strips (B69901/B69909), regular profile 12-tube strips (B56601/B56609), regular profile strips with attached caps (B72911) and regular profile non skirted plates (B50501/B50509). Cannot be used with B77101-B77109 8-tube strip combined with B79501 EU 8-Single attachable Indented Cap.

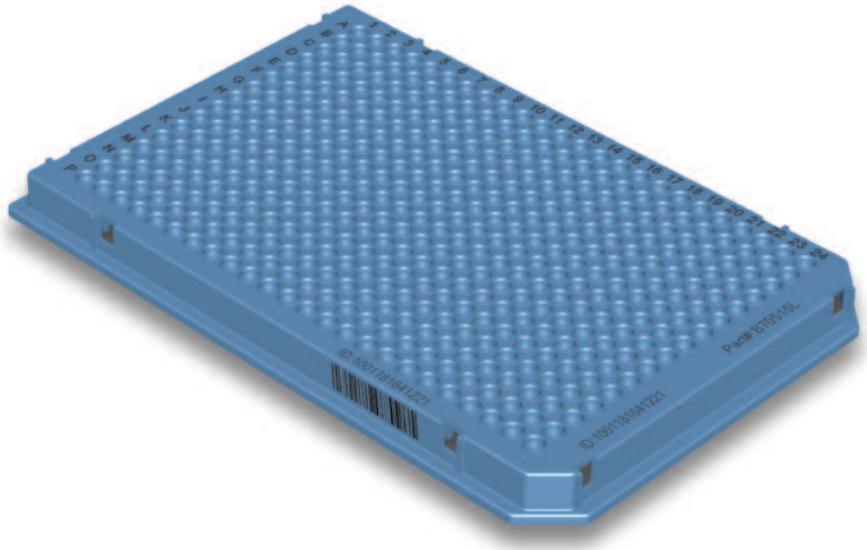
EU Adaptor ABI 7900 cycler "Wide"

For use with regular profile 8-tube strips (B69901/B69909), regular profile 12-tube strips (B56601/B56609), regular profile non skirted plates (B50501/B50509). This adaptor is required when using B77101-B77109 8-tube strip combined with B79501 EU 8-Single attachable Indented Cap.

Orderno	Description	Package Size
B79480	EU Adaptor1 Roche LC480 "Standard"	1 adaptor
B79481	EU Adaptor2 Roche LC480 "Wide"	1 adaptor
7500LAN	EU Adaptor3 ABI 7500 Fast cycler "Standard"	1 adaptor
7500LAW	EU Adaptor4 ABI 7500 Fast cycler "Wide"	1 adaptor
7900LAN	EU Adaptor5 ABI 7900 Fast cycler "Standard"	1 adaptor
7900LAW	EU Adaptor6 ABI 7900 Fast cycler "Wide"	1 adaptor
7900RAN	EU Adaptor7 ABI 7900 Cycler "Standard""	1 adaptor
7900RAW	EU Adaptor8 ABI 7900 Cycler "Wide""	1 adaptor



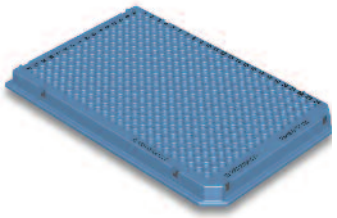
B71519L EU 384 Well Thin Wall plate, Roche 480 Type, Laser Mark Coded, white



I.7.0 384 (q)PCR plates

EU Thin-wall 384 well plate, Roche 480 type, flat, robust, stackable and robotic friendly

White

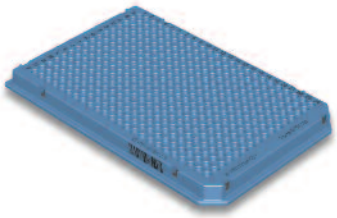


This full-skirted 384 well EU plate is designed to fit Roche 480 cyclers. Optimized for robotic high-throughput applications. Can be used in many 384 well block regular and Real-Time thermal cyclers (see tables on pages 26 - 29). Plates are rigid, flat and stackable. Closure can be accomplished with one of the EU Seals (157300, 157200). Plates contain BPLPM technology.

Orderno	Description	Package Size
B71515L	EU 384 Well Thin Wall plate, Roche 480 Type, Laser Mark Coded, natural	40 plates
B71519L	EU 384 Well Thin Wall plate, Roche 480 Type, Laser Mark Coded, white	40 plates
B71519LB	EU 384 Well Thin Wall plate, Roche 480 Type, Laser Mark Coded, barcoded, white	40 plates

EU Skirted thin-wall 384 well plate, ABI compatible type, flat, robust, stackable and robotic friendly

White

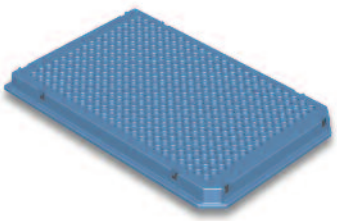


This superior 384 well EU plate is designed to fit ABI cyclers and optimized for robotic applications. Allows high-throughput and low-volume processing. Can be used in many 384 well block regular and Real-Time thermal cyclers (see tables on pages 26 - 29). Plates are rigid, flat and stackable. Closure can be accomplished with one of the EU Seals (157300, 157200).
Plates contain BPLPM technology.

Orderno	Description	Package Size
B70515L	EU 384 Well Thin Wall plate, ABI Type, Laser Mark Coded, natural	40 plates
B70519L	EU 384 Well Thin Wall plate, ABI Type, Laser Mark Coded, white	40 plates
B70515LB	EU 384 Well Thin Wall plate, ABI Type, Laser Mark Coded, barcoded, natural	40 plates

EU Skirted thin-wall 384 well plate, flat, robust, stackable and robotic friendly

White



This superior full-skirted 384 well EU plate is designed to standard 384 well cyclers and are fully optimized for robotic applications, and allows for high-throughput, low-volume processing. Can be used in many 384 well block regular and Real-Time thermal cyclers (see tables on pages 26 - 29). Plates are rigid, flat and stackable. Closure can be accomplished with one of the EU Seals (157300, 157200).

Orderno	Description	Package Size
B70515	EU 384 Well Thin Wall plate, rigid, stackable, natural	40 plates
B70519	EU 384 Well Thin Wall plate, rigid, stackable, white	40 plates

I.8.0 (q)PCR cap-strips

EU Robust indented flat 8 cap-strip

For qPCR optimized signals use B57801, EU Wide Optical 8-Cap Strip. For closure of all BIOplastics type PCR tubes, strips and plates. Indented cap prevents “finger touch”.

Orderno	Description	Package Size
B75701	EU Optical Thin-wall 8 cap-strip, natural	bag, 120
B75701B	EU Optical Thin-wall 8 cap-strip, natural	bag, 300

B75702	red	B75706	orange	B75710	black
B75703	blue	B75707	violet	B75711	natural, sterile
B75704	green	B75708	amber	B75712	SW colors
B75705	yellow	B75709	white		

EU Semi-domed thin-wall 8 cap-strip

For closure of all BIOplastics type PCR tubes, strips and plates.
For qPCR optimized signals use B57801, EU Wide Optical 8-Cap Strip.

Orderno	Description	Package Size
C79701	EU Semi-Domed Thin-wall 8 cap-strip, natural	bag, 120
C79701B	EU Semi-Domed Thin-wall 8 cap-strip, natural	bag, 300

C79702	red	C79708	amber	C79702B	red	C79708B	amber
C79703	blue	C79709	white	C79703B	blue	C79709B	white
C79704	green	C79710	black	C79704B	green	C79710B	black
C79705	yellow	C79711	natural, sterile	C79705B	yellow	C79711B	natural, sterile
C79706	orange	C79712	SW colors	C79706B	orange	C79712B	SW colors
C79707	violet			C79707B	violet		

EU Optical flat thin-wall 8 cap-strip

For closure of all BIOplastics type (q)PCR tubes, strips and plates. Can be use in all qPCR procedures. To prevent “finger touch” interference of the optical area B57801, EU Wide Optical 8-Cap Strip is offered as alternative.

Orderno	Description	Package Size
B79701	EU Optical Thin-wall 8 cap-strip, natural	bag, 120
B79701B	EU Optical Thin-wall 8 cap-strip, natural	bag, 300

B79702	red	B79708	amber	B79702B	red	B79708B	amber
B79703	blue	B79709	white	B79703B	blue	B79709B	white
B79704	green	B79710	black	B79704B	green	B79710B	black
B79705	yellow	B79711	natural, sterile	B79705B	yellow	B79711B	natural, sterile
B79706	orange	B79712	SW colors	B79706B	orange	B79712B	SW colors
B79707	violet			B79707B	violet		

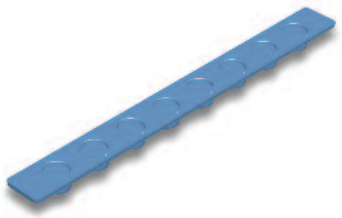
I.8.0 (q)PCR cap-strips

EU Optical wide area 8-cap strip robust with wide indented flat cap

12.6 mm²

Optimized for qPCR applications. Indented cap prevents "finger touch" signal interference.
For closure of all BIOplastics type (q)PCR tubes, strips and plates.

Orderno	Description	Package Size
B57801	EU Optical Wide 8 cap-strip,with wide indented flat cap, natural	bag, 120
B57801B	EU Optical Wide 8 cap-strip,with wide indented flat cap, natural	bag, 300
B57811	EU Optical Wide 8 cap-strip,with wide indented flat cap, natural, Sterile	bag, 120



EU 8-Single attachable optical wide indented cap

12.6 mm²

For closure of (q)PCR 8-tube strips type B77001(LP) and B77101(RP).

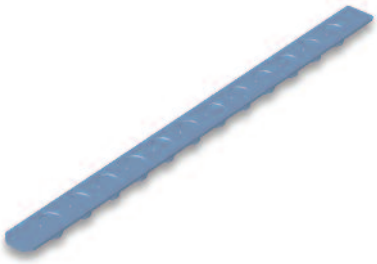
Orderno	Description	Package Size
B79501	EU 8-Single attachable Optical Wide indented cap-strip, natural	bag, 120

EU Optical wide area 12-cap strip robust with wide indented flat cap

12.6 mm²

Optimized for qPCR applications. Indented cap prevents "finger touch" signal interference.
For closure of all BIOplastics type (q)PCR tubes, strips and plates.

Orderno	Description	Package Size
B57821	EU Optical Wide 12 cap-strip,with wide indented flat cap, natural	bag, 120
B57821B	EU Optical Wide 12 cap-strip,with wide indented flat cap, natural	bag, 200
B57831	EU Optical Wide 12 cap-strip,with wide indented flat cap, natural, Sterile	bag, 120
B57831B	EU Optical Wide 12 cap-strip,with wide indented flat cap, natural, Sterile	bag, 200



EU Optical indented flat 12 cap-strip

7.1 mm²

For qPCR optimized signals use B57821, EU Wide Optical 12-Cap Strip.For closure of all BIOplastics type PCR tubes, strips and plates. Indented cap prevents "finger touch".

Orderno	Description	Package Size
B56501	EU Optical Thin-wall 12 cap-strip, natural	bag, 80
B56501B	EU Optical Thin-wall 12 cap-strip, natural	bag, 200

B56502	red	B56506	orange	B56510	black
B56503	blue	B56507	violet	B56511	natural, sterile
B56504	green	B56508	amber	B56512	SW colors
B56505	yellow	B56509	white		

I.8.I Sealing products

It is of the greatest importance that you select the best sealing option available for your (q)PCR plate and application. Would you just like to seal the plate during the PCR reaction, or store it afterwards? Do you want to be able to pierce the seal with a pipette tip, or not? Do you want to use a reusable seal? Do you want the seal to be adhesive, or do you want to use a heat seal principle? All these questions will be answered in the table below. It will help you to make exactly the right choice between the different seals.

Order number	Name	Material	Adhesive	Long Term Cold Storage	Pierceable	Disposable	Suitable for 384 wells	Optical for qPCR	Easy Removal
157300	EU Opti-Seal	Polyester	O	O		O	O	O	O
157200	EU Alu-seal	Aluminium	O	O	O	O	O		O
B57501	EU Smal Optical area cap plate	PP		+		O		O	+/-
B57601	EU Wide Optical area cap plate	PP		+/-		O		O	+

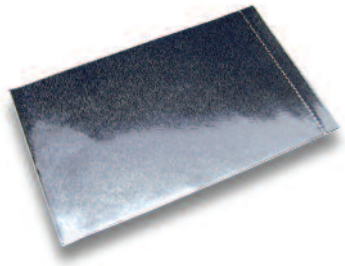
EU Opti-Seal™ optical disposable adhesive

Opti-Seal™ provides the best sealing option for EU plates. The EU Opti-Seal™ is non pierceable and can be easily removed after the (q)PCR reaction is performed. Pressure applied by the heated lid of the thermal cycler, is needed to keep the seal well closed during thermal cycling. Opti-Seal™ generates superior results and is designed and tested to be used in Real-Time PCR applications.

Orderno	Description	Package Size
157300	Opti-Seal, optical, disposable, adhesive	100 sheets

EU Alu-Seal™ disposable adhesive

Alu-Seal™ provides a good sealing option for plates. The Alu-Seal™ is pierceable and can be easily removed. Alu-Seals™ can be used in a wide range of applications like PCR, incubation and freezer storage.



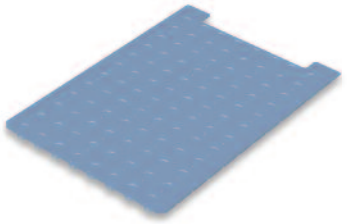
Orderno	Description	Package Size
157200	EU Alu-Seal disposable, adhesive	100 sheets

I.8.2 Sealing products, cap plates, cutable

EU Optical wide area 96 cap plate with wide area indented flat caps

12.6 mm²

Optimized for qPCR applications. Indented cap prevents "finger touch" signal interference. For closure of all BIOplastics type (q)PCR tubes, strips and plates as well as for BIOplastics Titer dilution and (cryo) storage tubes. Easy to cut by scissor to required format.



Orderno	Description	Package Size
B57601	EU Optical Wide Area Indented 96 cap-plate, cutable, natural	25 plates

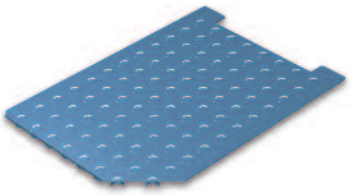
Indented qPCR Cap

the "optical area" is indented to the cap surface which prevents "touching" the optical area

EU Indented flat cap plate 96 format

7.1 mm²

For closure of all BIOplastics type PCR tubes, strips and plates as well as for BIOplastics Titer dilution and (cryo) storage tubes. Indented cap prevents "finger touch" interference. For qPCR optimized signals use B57601, EU Wide Optical 96-Cap Plate. Can be cut to required size.



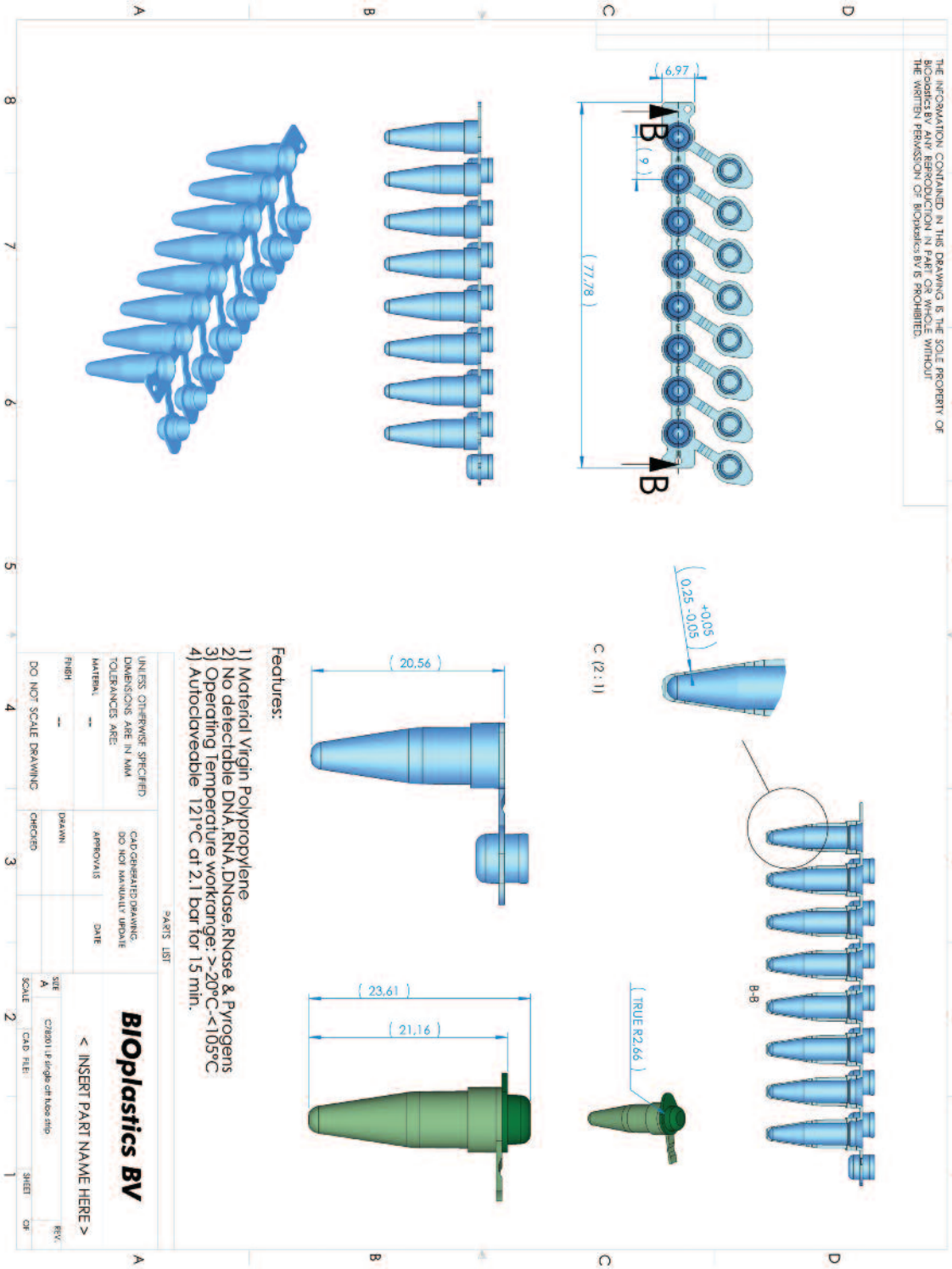
Orderno	Description	Package Size
B57501	EU 96 x 0.2 ml cap plate, natural	25 plates

B57502	red	B57506	orange	B57510	black
B57503	blue	B57507	violet	B57511	natural, sterile
B57504	green	B57508	amber	B57512	SW colors
B57505	yellow	B57509	white		

Sealing tool

The Sealing Tool (a roller) can assist you in putting different seals onto (q)PCR plates and strips, instead of, or in addition to, using your fingers.

Orderno	Description	Package Size
530000	Sealing Tool	1 roller



Product dimensions and tolerances are available on request for qualified customers

2. GRADIENT FILTERTIPS

BIOplastics Gradient filtertips provide a superior protection against aerosols that could contaminate your pipette, cross-contaminate your sample, and contaminate your valuable reaction set up. The protection that is given by the 18 µm gradient Self Sealing pores is optimal and enables precise and reproducible pipetting. In general, the use of SSNC (Self Sealing Non-Collapsing) filtertips protects against cross-contamination. Read more about this topic on pages 76 "The essence of filter material".

Use the Tip Selector Chart in this catalog, or the dynamic on-line Tip Database at our website **www.bioplastics.com** to find the right tip for your application.

How to find the right tip for your application and pipette

We would like to assist you in making the right choice of tip or filter tip for your pipette.
Use the Tip Selector Chart in this catalog, or the dynamic on-line Tip Database at our website **www.bioplastics.com** to find exactly the right tip for your application.

Find tips in this catalog: use the tip selector charts.

Use the tip selector charts in 2 simple steps:

1. From the Pipette Tip Selector Chart 1 (pages 69 to 73), choose the brand of pipette (e.g. 1 channel Gilson P200 20 - 200 µl). You will find the type of tips you need (e.g. type B & D). Some tips are so similar in shape that they will fit the same brands/volume of pipette, but differ in length or other specifications.
2. From the Pipette Tip Family Chart 2 (pages 74 to 75), look up this type (e.g. type A) and choose which other specifications you need (e.g. SSNC filtertip). You will find the basic order number and the catalog page of this tip (e.g. B95501 on page 77).

Other ways to find something in this catalog....

1. Just browse through the catalog. Every tip itself has specific information about its family/type, the pipettes it will fit, packaging configurations, and other features.
2. If you already know the order number of the item you need, look up the corresponding page in the index in the back of this catalog (page 125).

The icon legend

Attached to the back cover of this catalogue is a fold-out legend of icon symbols. Almost every item in this catalog has one or more icons that describe specific features like filter pore size, evaporation grade, orifice etc.

Find tips on-line: www.bioplastics.com

The online tip database at the BIOplastics website is a very convenient tool to find the right tip for your pipette and/or application. Just select the volume range and the brand of pipette desired, and receive search results within seconds. Results are presented with all the relevant properties of that tip, a schematic drawing, and the different packaging options.

I. Choose the pipette brand you need a tip for and find the tip family.

Brand		Volume	Type	A	B	C	D	E	K	M	R	Z0
Biohit	Proline (fixed)	5µl, 10µl	1		O		O					O
Biohit	Proline (fixed)	20µl, 25µl, 50µl, 100µl, 200µl	1									
Biohit	Proline (fixed)	250µl, 500µl, 1000µl	1							O		
Biohit	Proline	0.1 - 2.5µl, 0.5µl - 10µl	1		O		O					O
Biohit	Proline	2 - 20µl, 5 - 50µl	1						O			
Biohit	Proline	10 - 100µl	1							O		
Biohit	Proline	20 - 200µl, 50µl - 200µl	1									
Biohit	Proline	100 - 1000µl, 200 - 1000µl	1							O		
Biohit	Proline	5 - 50µl	4						O			
Biohit	Proline	20 - 250µl	4						O			
Biohit	Proline	0.5 - 10µl	8				O					
Biohit	Proline	5 - 50µl	8						O			
Biohit	Proline	50 - 250µl, 50 - 300µl	8						O			
Biohit	Proline	0.5 - 10µl	12				O					
Biohit	Proline	5 - 50µl	12						O			
Biohit	Proline	50 - 250µl, 50 - 300µl	12						O			
Biohit	Proline Electronic / ePET	0.2 - 10µl	1E		O	O						
Biohit	Proline Electronic / ePET	5 - 100µl	1E									
Biohit	Proline Electronic / ePET	10 - 250µl	1E									
Biohit	Proline Electronic / ePET	10 - 500µl, 50 - 1000µl	1E							O		
Biohit	Proline Electronic / ePET	5 - 100µl	4E						O			
Biohit	Proline Electronic / ePET	25 - 250µl	4E									
Biohit	Proline Electronic / ePET	0.2 - 10µl	8E				O					
Biohit	Proline Electronic / ePET	5 - 100µl	8E						O			
Biohit	Proline Electronic / ePET	25 - 250µl	8E									
Biohit	Proline Electronic / ePET	0.2 - 10µl	12E				O					
Biohit	Proline Electronic / ePET	5 - 100µl, 25 - 250µl	12E									
Biohit	eLINE Electronic	0.2 - 10µl	1E		O	O						
Biohit	eLINE Electronic	5 - 120µl	1E									
Biohit	eLINE Electronic	20 - 300µl	1E									
Biohit	eLINE Electronic	50 - 1000µl	1E							O		
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**R**	**Z0**
Gilson	Pipetman F2~F200 (fixed)	2µl, 5µl, 10µl, 20µl, 25µl 50µl, 100µl, 200µl	1	O								
Gilson	Pipetman F250~F1000 (fixed)	250µl, 300µl, 400µl, 500µl, 1000µl	1							O		
Gilson	Pipetman P2	0.1 - 2µl, 0.5 - 10µl	1		O		O					O
Gilson	Pipetman P10	1 - 10µl	1				O					
Gilson	Pipetman P20	2 - 20µl	1	O								
Gilson	Pipetman P100	20 - 100µl, 50 - 200µl	1	O					O			
Gilson	Pipetman P200	20 - 200µl	1	O					O			
Gilson	Pipetman UltraMultichannel 12x200	20 - 200µl	1	O								
Gilson	Pipetman P1000	200 - 1000µl	1							O		

1. Choose the pipette brand you need a tip for and find the tip family.

Brand		Volume	Type	A	B	C	D	E	K	M	Z0
Eppendorf	Reference (fixed)	1µl , 2µl, 5µl, 10µl	1		O	O	O				O
Eppendorf	Reference (fixed)	10µl , 20µl, 25µl, 50µl, 100µl	1	O							
Eppendorf	Reference (fixed)	200µl, 250µl, 500µl, 1000µl	1							O	
Eppendorf	Reference	0.1 - 2.5µl	1		O		O				O
Eppendorf	Reference	0.5 - 10µl	1		O	O	O				O
Eppendorf	Reference	2 - 20µl	1	O		O					
Eppendorf	Reference	10 - 100µl	1	O				O			
Eppendorf	Reference	20 - 200µl	1	O							
Eppendorf	Reference	100 - 1000µl	1							O	
Eppendorf	Research (fixed)	10µl, 20µl, 25µl, 50µl, 100µl	1	O							
Eppendorf	Research (fixed)	200µl, 250µl, 500µl, 1000µl	1							O	
Eppendorf	Research	0.1 - 2.5µl	1				O				O
Eppendorf	Research	0.5µl, 10µl	1		O	O	O				O
Eppendorf	Research	2 - 20µl, 10 - 100µl, 20 - 200µl	1	O							
Eppendorf	Research	100 - 1000µl	1							O	
Eppendorf	Research	0.5µl - 10µl	8			O	O				O
Eppendorf	Research	50 - 100µl, 30 - 300µl	8	O							
Eppendorf	Research	0.5 - 10µl	12			O	O				O
Eppendorf	Research	50 - 100µl, 30 - 300µl	12	O							
Eppendorf	Research Pro	0.5 - 10µl	1E		O	O	O				O
Eppendorf	Research Pro	5 - 100µl, 20 - 300µl	1E	O							
Eppendorf	Research Pro	50 - 1000µl	1E							O	
Eppendorf	Research Pro	0.5 - 10µl	1E			O	O				O
Eppendorf	Research Pro	5 - 100µl, 20 - 300µl	8E	O							
Eppendorf	Research Pro	50 - 1000µl	8E							O	
Eppendorf	Research Pro	0.5 - 10µl	12E			O	O				O
Eppendorf	Research Pro	5 - 100µl, 20 - 300µl	12E	O							
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**Z0**
Finnpipette	Colour (fixed)	5µl, 10µl, 20µl	1	O							
Finnpipette	Colour (fixed)	25µl, 50µl, 100µl, 200µl	1	O				O	O		
Finnpipette	Colour (fixed)	250µl, 500µl, 1000µl	1							O	
Finnpipette	Colour	0.5 - 10µl	1	O							
Finnpipette	Colour	5 - 40µl, 40 - 200µl	1	O				O	O		
Finnpipette	Colour	200 - 1000µl	1							O	
Finnpipette	Colour	5 - 50µl, 50 - 300µl	4	O				O	O		
Finnpipette	Colour	5 - 50µl, 50 - 300µl	8	O				O	O		
Finnpipette	Colour	5 - 50µl, 50 - 300µl	12	O				O	O		
Finnpipette	Digital (fixed)	1µl, 2µl, 5µl, 10µl	1								O
Finnpipette	Digital (fixed)	20µl, 25µl, 50µl, 100µl, 200µl	1	O				O	O		
Finnpipette	Digital (fixed)	250µl, 500µl, 1000µl	1							O	
Finnpipette	Digital	0.2 - 2µl	1								O
Finnpipette	Digital	0.5 - 10µl	1						O		O
Finnpipette	Digital	2 - 20µl, 5 - 40µl	1	O							

I. Choose the pipette brand you need a tip for and find the tip family.

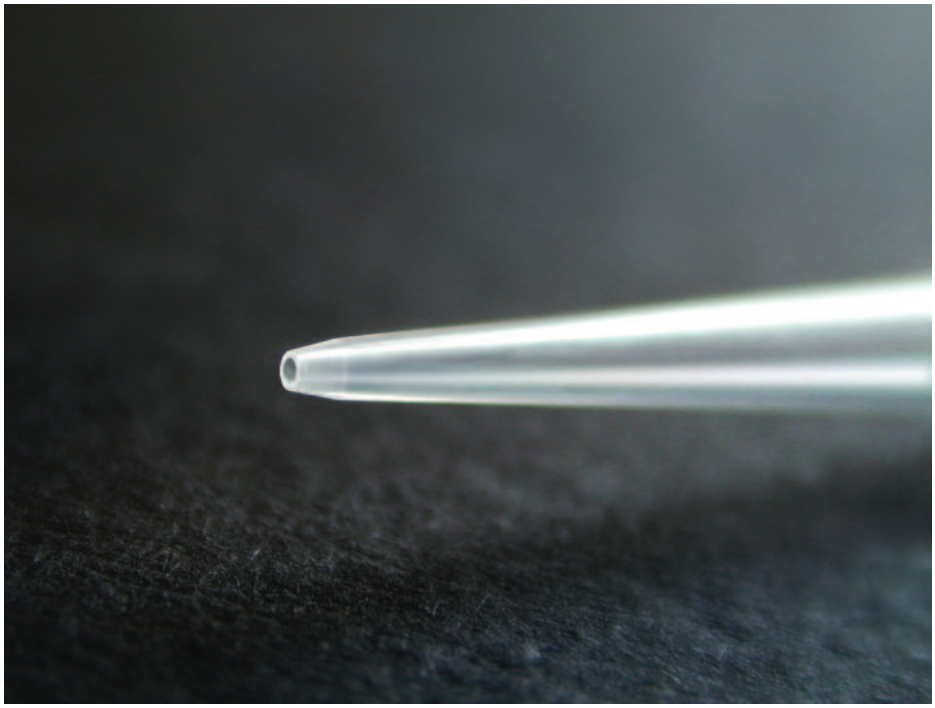
Brand		Volume	Type	A	B	C	D	E	K	M	Z0
Finnpipette	Digital	10 - 100µl	1	O				O			
Finnpipette	Digital	20 - 200µl	1	O				O	O		
Finnpipette	Digital	100 - 1000µl	1							O	
Finnpipette	Digital	200 - 1000µl	1							O	
Finnpipette	Digital	0.5 - 10µl	8								O
Finnpipette	Digital	5 - 50µl, 50 - 300µl	8	O				O	O		
Finnpipette	Digital	5 - 50µl, 50 - 300µl	12	O				O	O		
Finnpipette	Digital	5 - 50µl	16	O				O			
Finnpipette	BioControl	5 - 40µl, 40 - 200µl	1E	O				O	O		
Finnpipette	BioControl	200 - 1000µl	1E							O	
Finnpipette	BioControl	0.5 - 10µl	8E								O
Finnpipette	BioControl	5 - 50µl	8E	O				O	O		
Finnpipette	BioControl	50 - 300µl	8E	O				O	O		
Finnpipette	BioControl	50 - 1500µl	8E							O	
Finnpipette	BioControl	5 - 50µl	12E	O				O	O		
Finnpipette	BioControl	50 - 300µl	12E	O				O	O		
Finnpipette	Multistepper	5 - 250µl	8E							O	
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**Z0**
Costar	OnePette	1 - 20µl	1	O					O		
Costar	OnePette	10 - 100µl, 20 - 200µl	1	O				O	O		
Costar	OnePette	100 - 1000µl	1							O	
Costar	8-Pette	20 - 200µl	8	O					O		
Costar	12-Pette	20 - 200µl	12	O					O		
Costar	Octapette (fixed)	25 - 200µl	8	O					O		
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**Z0**
Hamilton	SoftGrip (fixed)	5µl, 10µl	1				O				O
Hamilton	SoftGrip (fixed)	25µl, 50µl, 100µl, 200µl, 250µl, 300µl	1	O					O		
Hamilton	SoftGrip	0,2 - 2µl, 1 - 10µl	1				O				O
Hamilton	SoftGrip	2.5 - 25µl, 10 - 100µl, 30 - 300µl	1	O					O		
Hamilton	SoftGrip	5 - 50µl, 30 - 300µl	8	O					O		
Hamilton	SoftGrip	5 - 50µl, 30 - 300µl	12	O					O		
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**Z0**
Socorex	Acura 811	1µl, 5µl	1			O					
Socorex	Acura 811	10µl, 20µl	1	O		O					
Socorex	Acura 811	25µl, 50µl, 100µl	1	O							
Socorex	Acura 811	200µl, 250µl, 500µl, 1000µl	1							O	
Socorex	Acura 821	5 - 50µl	1	O				O			
Socorex	Acura 821	50 - 200µl	1	O				O			
Socorex	Acura 821	200 - 1000µl	1							O	

I. Choose the pipette brand you need a tip for and find the tip family.

Brand		Volume	Type	A	B	C	D	E	K	M	Z0
Socorex	Acura 851	5 - 50µl	8	O							
Socorex	Acura 851	50 - 200µl	8	O				O			
Socorex	Acura 851	5 - 50µl	12	O							
Socorex	Acura 851	50 - 200µl	12	O				O			
Socorex	Calibra 822	0.2 - 2µl	1E			O					
Socorex	Calibra 822	1 - 10µl	1E	O		O					
Socorex	Calibra 822	2- 20µl, 10 - 100µl	1E	O							
Socorex	Calibra 822	20- 200µl	1E	O				O			
Socorex	Calibra 822	100 - 1000µl	1E							O	
Socorex	Calibra 852	1- 10µl	8E			O					
Socorex	Calibra 852	10 - 100µl, 20 - 200µl	8E	O							
Socorex	Calibra 852	10 - 100µl, 20 - 200µl	12E	O				O			
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**Z0**
Volac		1 - 200µl	1	O							
Volac		100 - 1000µl	1							O	
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**Z0**
Oxford	Benchmate	0.5 - 10µl	1		O	O	O				O
Oxford	Benchmate	10 - 50µl	1					O	O		
Oxford	Benchmate	40 - 200µl	1					O	O		
Oxford	Benchmate	200 - 1000µl	1							O	
Oxford	Benchmate	1000 - 5000µl	1							O	
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**Z0**
SMI	Airpettor	1000µl	1							O	
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**Z0**
MLA		1 - 200µl	1	O				O			
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**Z0**
Nichiryo		0.5 - 10µl	1		O	O					O
Nichiryo		10 - 50µl	1	O							
Nichiryo		40 - 200µl	1	O				O	O		
Nichiryo		200 - 1000µl	1							O	
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**Z0**
Excaliber		10 - 200µl, 100 - 1000µl	1	O							
Brand		**Volume**	**Type**	**A**	**B**	**C**	**D**	**E**	**K**	**M**	**Z0**
Helena		200 - 1000µl							O		

I. Choose the pipette brand you need a tip for and find the tip family.

Brand	Volume	Type	A	B	C	D	E	K	M	Z0
Titertek	0.5 - 10µl	1	O		O			O		
Titertek	5 - 50µl	1	O					O		
Titertek	40 - 200µl, 50 - 200µl	1	O							
Titertek	50 - 300µl	1	O				O	O		
Titertek	200 - 1000µl	1							O	
Titertek	1 - 10µl	1	O		O					



2. Select the family of tip you need and choose from the different possibilities within the family.

Type			Volume	Ordernumber	Page
A	Regular	Gelloading	200 µl	B71931	83
A	Regular	Beveled Orifice	200 µl	B70002	83
A	Regular	Extra Long	200 µl	B74109	84
A	Regular	Certified	200 µl	B60009	86
A	Regular	Low Adhesion, Extra Long	200 µl	L74109	88
A	Regular	Certified, Extra Long	200 µl	B74120	86
A	Regular	Low Adhesion	200 µl	L60002	88
A	SSNC	Beveled Orifice	20 µl	B95020	78
A	SSNC	Beveled Orifice	50 µl	B90550	78
A	SSNC	Beveled Orifice	100 µl	B95100	78
A	SSNC	Beveled Orifice	150 µl	B90151	79
A	SSNC	Extra Long	200 µl	B90222	79
Type			**Volume**	**Ordernumber**	**Page**
B Nanotip	Regular		10 µl	B70400	82
B Nanotip	SSNC		5 µl	B95501	77
B Nanotip	Regular	Certified	10 µl	B70411	85
B Nanotip	Regular	Low Adhesion	10 µl	L70400	87
Type			**Volume**	**Ordernumber**	**Page**
C Microtip	Regular		10 µl	B71029	82
C Microtip	Regular	Certified	10 µl	B70030	85
C Microtip	Regular	Low Adhesion	10 µl	B70569	87
C Microtip	SSNC		10 µl	B95010	77
C Microtip	SSNC		20 µl	B90114	78
Type			**Volume**	**Ordernumber**	**Page**
D Microtip	Regular		10 µl	B70558	82
D Microtip	Regular	Certified	10 µl	B70028	85
D Microtip	Regular	Low Adhesion	10 µl	B70560	87
D Microtip	SSNC		10 µl	B95011	77
Type			**Volume**	**Ordernumber**	**Page**
E	Regular		100 µl	B74114	83
E	SSNC		100 µl	B90225	79
E	Regular	Low Adhesion	100 µl	L74114	88
Type			**Volume**	**Ordernumber**	**Page**
K	Regular	Graduated	300 µl	B71400	84
K	Regular	Certified	300 µl	B64174	86
K	Regular	Graduated, Low Adhesion	100 µl	L71400	88
K	SSNC	Graduated	10 µl	B90122	78
K	SSNC	Graduated	100 µl	B90111	78
K	SSNC	Graduated	200 µl	B95201	79

A

B

C

D

E

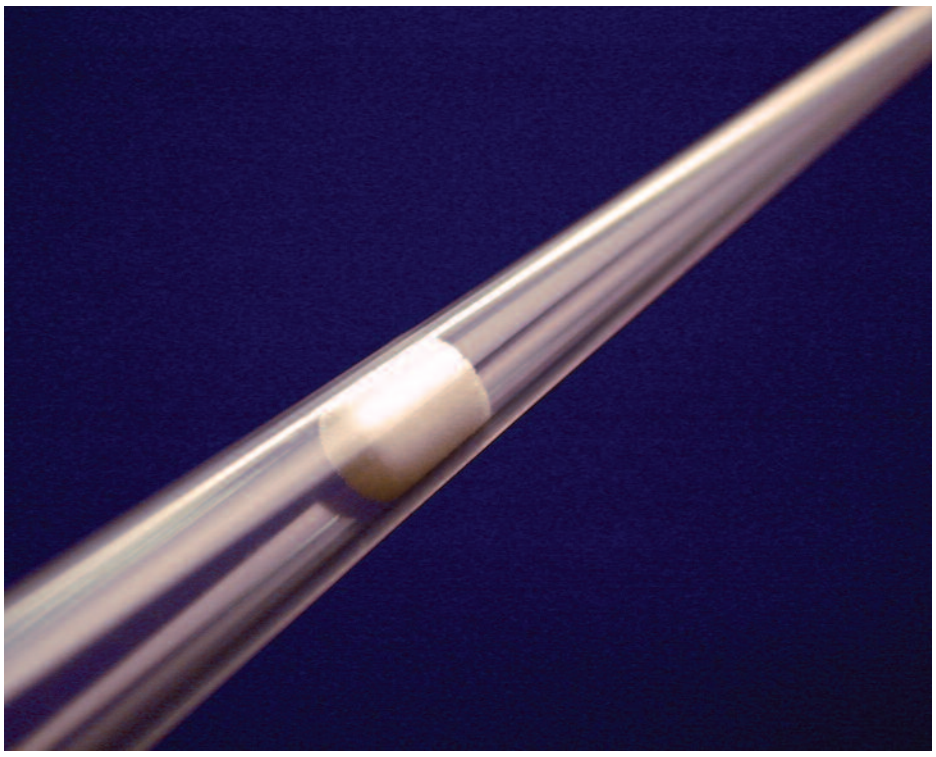
K

2. Select the family of tip you need and choose from the different possibilities within the family.

Type			Volume	Ordernumber	Page
M	Regular		1000 µl	B74271	84
M	Regular	Certified	1000 µl	B64276	86
M	Regular	Graduated, Low Adhesion	1000 µl	L74271	89
M	SSNC		1000 µl	B95210	79
Type			**Volume**	**Ordernumber**	**Page**
Z0	Regular		10 µl	B75029	82
Z0	SSNC		10 µl	B95012	77
Z0	Regular	Certified	10 µl	B75040	85
Z0	Regular	Graduated, Low Adhesion	10 µl	L75029	87

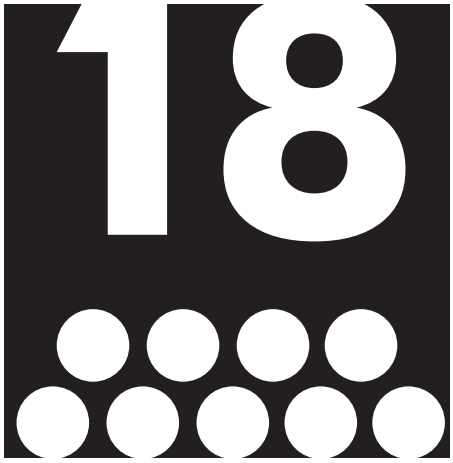
M

Z0



The essence of filter material

Filtertips are generally accepted as the solution in the prevention of cross-contamination in PCR reactions. A main source of this contamination is the formation of aerosols in the shaft of the pipette used during the PCR liquid handling. Carry-over of previously pipetted DNA, RNA and proteins can cause false positive signals.



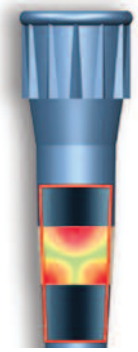
Pore size 18 µm: SSNC filter

Filter materials

The use of a filter in a filter tip eliminates the formation of aerosols in the shaft of the pipette, because it blocks the air-to-liquid interface between the sample and the shaft. This simple idea has evolved in numerous types and brands of filtertips and filter materials.
Most filters are made of inert 3-dimensional cross-linked PE (Polyethylene).

Self sealing protection versus accuracy

The most important parameter for a filter tip is the pore size and the ratio of filter length and pore size of the applied filter material. The pore size must be smaller than 25 µm to protect against aerosols at all. If the pore size is between 20 and 25 µm, a filter will give reasonable protection, however liquid will pass when overloaded. Below 20 µm, a filter will give superior protection. When pore sizes get below 14 µm, it becomes too difficult to pipet liquids in a reproducible manner, because of the airflow barrier. Therefore, it makes no sense to use filters with this small pore size.The costs and investments to manufacture a filter material with an average pore size of 18 µm are high. BIOplastics' Self Sealing Non Collapsing (SSNC) filter tip meets this 18 µm pore size specification and is build up with a density gradient from top to bottom. It is the perfect balance between superior protection and accurate pipetting.



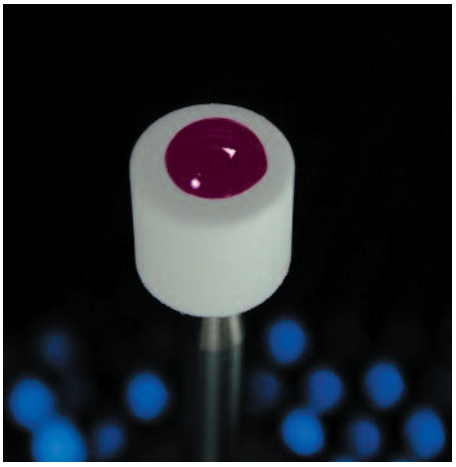
3-dimensional GRADIENT filter
Average pore size of 18 µm. Gradient density guides airflow and protects against aerosols.

Filtering and gradient capacity

The filtering capacity of a certain filter is defined as the ratio of filter length and pore size. The longer a filter is, the better it filters. This relation is almost linear. BIOplastics filters have the longest length available in the market when compared to other brands. By applying a gradient within the filter (see picture 3-dimensional GRADIENT filter) the aerosols air flow length is even extended and aerosol particles are additionally forced to a non linear track. When these three factors are combined, the result is a superior filter tip.

Tips in Multi Purpose Racks (MPR)

BIOplastics BV has designed multi purpose racks in which tips are packed. Tips are made of medical grade extreme clear and soft PP with no molecule binding properties. The soft tips ensure superior pipetting, easy pipette seating and releasing, thus preventing RSI. Each rack consists of a colored bottom part, a transparent hinged lid and a multi-purpose interchangeable tip insert. The empty box can be used for storage. The multi-purpose interchangeable tip insert can hold PCR plates and strips. Additional tube grids are available which enable you to make your own 0.5 ml / 1.5 ml microcentrifuge tube storage / freezer rack. Whenever you buy racked tips you end up with not only an excellent tip, but also a good start for an even more organized lab!



BIOplastics SSNC filter. Pore size is 18 µm.
This filter forms a barrier against aerosols.

2.1 SSNC Filtertips

5 µl Nano tip

type **B**

Fits Gilson, Biohit, Eppendorf, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B95501	SSNC 5 µl filtertip, sterile	8 racks of 96 (768)

10 µl

type **Z0**

Fits Gilson, Biohit, Eppendorf, Finnpipette, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B95012	SSNC 10 µl filtertip, sterile	8 racks of 96 (768)

10 µl

type **D**

Fits Gilson, Rainin, Eppendorf, Biohit, Nichiryo, Oxford and others.

Orderno	Description	Package Size
B95011	SSNC 10 µl filtertip, sterile	8 racks of 96 (768)

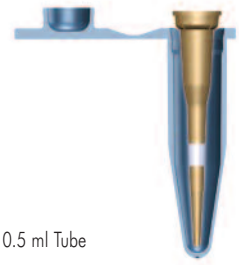
10 µl

type **C**

Fits Eppendorf, Nichiryo, Oxford, Socorex, Titertek, and others.

Orderno	Description	Package Size
B95010	SSNC 10 µl filtertip, sterile	8 racks of 96 (768)

B95501, 5 µl Nano Tip

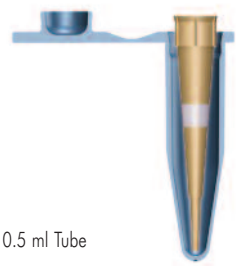


0.5 ml Tube

B95010, 10 µl Tip

0.5 ml Tube

B95011, 10 µl Tip



0.5 ml Tube

B95012, 10 µl Tip

0.5 ml Tube

2.1 SSNC Filtertips

10 µl Graduated tip

type **K**

Fits Gilson, Biohit, Costar, Finnpipette, Nichiryo, Oxford, Titertek, and others.

Orderno	Description	Package Size
B90122	SSNC 10 µl filtertip, sterile	8 racks of 96 (768)

20 µl

type **C**

Fits Eppendorf, Nichiryo, Oxford, Socorex, Titertek, and others.

Orderno	Description	Package Size
B90114	SSNC 20 µl filtertip, sterile	8 racks of 96 (768)

20 µl

type **A**

Fits Gilson, Costar, Eppendorf, Excaliber, Finnpipette, Nichiryo, Socorex, Volac, and others.

Orderno	Description	Package Size
B95020	SSNC 20 µl filtertip, sterile	8 racks of 96 (768)

50 µl

type **A**

Fits Gilson, Costar, Eppendorf, Excaliber, Finnpipette, Nichiryo, Socorex, Volac, and others.

Orderno	Description	Package Size
B90550	SSNC 50 µl filtertip, sterile	8 racks of 96 (768)

100 µl

type **A**

Fits Gilson, Costar, Eppendorf, Excaliber, Finnpipette, Nichiryo, Socorex, Volac, and others.

Orderno	Description	Package Size
B95100	SSNC 100 µl filtertip, sterile	8 racks of 96 (768)

100 µl Graduated tip

type **K**

Fits Gilson, Biohit, Costar, Finnpipette, Nichiryo, Oxford, Titertek, and others.

Orderno	Description	Package Size
B90111	SSNC 100 µl filtertip, sterile	8 racks of 96 (768)

2.1 SSNC Filtertips

100 µl

type **E**

Fits Eppendorf, Costar, Finnpipette, Nichiryo, Oxford, Socorex, and others.

Orderno	Description	Package Size
B90225	SSNC 100 µl filtertip, sterile	8 racks of 96 (768)

150 µl

type **A**

Fits Gilson, Finnpipette, Titertek, and others.

Orderno	Description	Package Size
B90151	SSNC 150 µl filtertip, sterile	8 racks of 96 (768)

200 µl Graduated tip

type **K**

Fits Gilson, Biohit, Costar, Finnpipette, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B95201	SSNC 200 µl filtertip, sterile	8 racks of 96 (768)

200 µl Extra long

type **A**

Fits Gilson, Biohit, Costar, Finnpipette, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B90222	SSNC 200 µl filtertip, Extra Long, sterile	8 racks of 96 (768)

1000 µl

type **M**

Fits Gilson, Eppendorf, Costar, Finnpipette, Nichiryo, Oxford, Socorex, SMI, Titertek, Volac, and others.

Orderno	Description	Package Size
B95210	SSNC 1000 µl filtertip, sterile	8 racks of 72 (576)

3. PIPETTE TIPS

The accuracy of pipetting procedures greatly depends on the quality of the tip used. There is no sense in buying an expensive accurate pipette and then use tips of inferior quality. Tips should be made of the highest quality virgin PP (Polypropylene), so they are flexible and soft to secure a good, leak-free fit around the shaft of the pipette.

All our tips are designed to have a very fine orifice for complete, reproducible pipetting. Some tips, marked with the beveled orifice icon, have a special 45° beveled orifice to guide the rejection of the fluids even better. Tips with special features can be found in the relevant chapters.

To find the right tip for your application and pipette see page 68-75 or the interactive options at www.bioplastics.com.

3.0 General information pipette tips

Pipette tips for (q)PCR, low adhesion, non-binding, high recovery

The accuracy of pipetting particularly depends on the quality of the tips used. (q)PCR methods are more frequently being used in diagnostic applications, therefore BIOplastics BV has developed a superior pipette tip for use in any (q)PCR or related high performance technique. BIOplastics BV has used existing knowledge of superior design and manufacturing capabilities to generate new highly accurate pipette tips.

Low adhesion and non-binding

BIOplastics BV is using a similar high performance blend of polypropylene as used in EU (q)PCR tubes and plates. By using this flexible material, a perfect seal to the pipette is guaranteed. The inert material does not hold a surface charge and assures no binding of any charged molecules like DNA, RNA, proteins etc.. Furthermore, high recovery is achieved due to the mould polish and material characteristics. This means that "all" liquid is pipetted and very limited, if any, liquid films will remain in the tip enabling the highest possible sample recovery.

Tips in multi purpose racks (MPR)

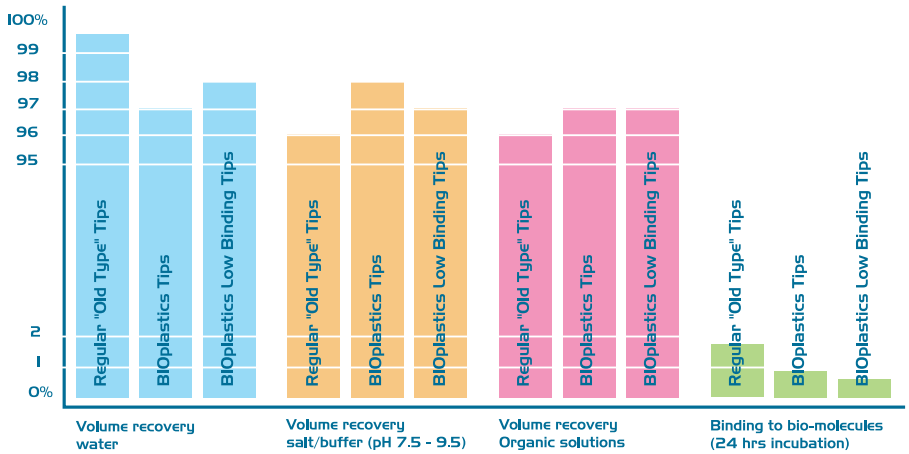
BIOplastics BV has designed new multi purpose racks in which the tips are packed. Each rack consist of a coloured bottom part, a transparent hinged lid and multi-purpose support unit which holds the interchangeable tip insert. The empty box can be used for storage. The multi-purpose support unit can hold (q)PCR plates and strips. Additional tube grids are available which enable you to make your own 0.5 ml / 1.5 ml microcentrifuge tube storage / freezer rack. Whenever you buy racked tips, you end up with not only an excellent tip, but at the same time a good start for an even more organized lab! Yet another smart design from BIOplastics BV to serve customers the best way we can.

Anti static pipette tips, why how and when they become favorable.

BIOplastics pipette tips are designed for use in molecular biological applications, and more specifically for pipetting DNA, RNA, proteins and solutions commonly used in and around the (q)PCR process.

BIOplastics has optimized pipette and filter tips by means of design and raw material selection to meet highest requirements.
By selecting medical grade materials with anti–static properties, BIOplastics has reduced the biological molecule binding to the lowest possible amount. BIOplastics pipette tips become favorable when pipetting buffer, salt solutions and biological molecules (proteins, DNA, RNA). Differences in hydrophobic and hydrophilic properties of solutions, raw material surface and biomolecules cause this “phenomenon”.
If pipetting water contact us for “old type regular tips”.

	Regular "Old Type" Tips	BIOplastics Tips	BIOplastics Low Binding Tips
Volume recovery water	99.8%	97%	98%
Volume recovery salt/buffer (pH 7.5 - 9.5)	96%	98%	97%
Volume recovery organic solutions	96%	97%	97%
Binding to bio-molecules (24 hrs incubation)	0.5 -1 %	< 0.2%	< 0.15%



3.1 Regular tips

10 µl

type **D**

Fits Gilson, Rainin, Eppendorf, Biohit, Nichiryo, Oxford and others.

Orderno	Description	Package Size
B70558	Natural	bag, 1000
B70559	Natural	8 racks of 96 (768)
B71012	Natural, sterile	8 racks of 96 (768)

10 µl Nano tip

type **B**

Fits Gilson, Biohit, Eppendorf, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B70400	Natural	bag, 1000
B70401	Natural	8 racks of 96 (768)
B70402	Natural, sterile	8 racks of 96 (768)

10 µl

type **Z0**

Fits Gilson, Biohit, Eppendorf, Finnpipette, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B75029	Natural	bag, 1000
B75030	Natural	8 racks of 96 (768)
B75031	Natural, sterile	8 racks of 96 (768)

10 µl

type **C**

Fits Eppendorf, Nichiryo, Oxford, Socorex, Titertek and others

Orderno	Description	Package Size
B71029	Natural	bag, 1000
B71030	Natural	8 racks of 96 (768)
B71031	Natural, sterile	8 racks of 96 (768)

3.1 Regular tips

100 µl

type **E**

Fits Eppendorf, Costar, Finnpipette, Nichiryo, Oxford, Socorex, and others.

Orderno	Description	Package Size
B74114	Natural	bag, 1000
B74123	Natural	8 racks of 96 (768)
B74117	Natural, sterile	8 racks of 96 (768)

200 µl

type **A**

Fits Gilson, Costar, Eppendorf, Excaliber, Biohit, Finnpipette, Nichiryo, Socorex, Excaliber, Volac and others.

Orderno	Description	Package Size
B71931	Natural	bag, 1000
B71932	Natural	8 racks of 96 (768)
B71933	Natural, sterile	8 racks of 96 (768)

200 µl

type **A**

Fits Gilson, Costar, Eppendorf, Excaliber, Finnpipette, Nichiryo, Socorex, Volac, and others.

Orderno	Description	Package Size
B70002	Natural	bag, 1000
B70008	Natural	8 racks of 96 (768)
B70009	Natural, sterile	8 racks of 96 (768)

3.1 Regular tips

200 µl Extra long tip

type **A**

Prevents "pipette shaft touching" contamination, especially when pipetting tall tubes such as blood collection tubes.
Fits Gilson, Biohit, Eppendorf, Finnpipette, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B74109	Natural	bag, 1000
B74110	Natural	8 racks of 96 (768)
B74111	Natural, sterile	8 racks of 96 (768)

300 µl Graduated tip

type **K**

Fits Gilson, Biohit, Costar, Finnpipette, Nichiryo, Oxford, Titertek, and others.

Orderno	Description	Package Size
B71400	Natural	bag, 1000
B74173	Natural	8 racks of 96 (768)
B74174	Natural, sterile	8 racks of 96 (768)

1000 µl Extra long tip 1300 µl

type **M**

Fits Gilson, Eppendorf, Finnpipette, SMI, Socorex, Titertek, Volac, Costar and others.

Orderno	Description	Package Size
B74271	Natural	bag, 1000
B74274	Natural	8 racks of 72 (576)
B74276	Natural, sterile	8 racks of 72 (576)

3.2 Certified tips

These tips are certified to be free of any detectable levels of pyrogen, RNase or DNAse activity, DNA and ATP. They are available either with or without certificate.

10 µl

type **D**

Fits Biohit, Rainin, Eppendorf, Biohit, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B70028	Natural	8 racks of 96 (768)
B70029	Natural, with certificate	8 racks of 96 (768)

10 µl Nano tip

type **B**

Fits Gilson, Biohit, Eppendorf, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B70411	Natural	8 racks of 96 (768)
B70411C	Natural, with certificate	8 racks of 96 (768)

10 µl

type **Z0**

Fits Gilson, Biohit, Eppendorf, Finnpipette, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B75040	Natural	8 racks of 96 (768)
B75040C	Natural, with certificate	8 racks of 96 (768)

10 µl

type **C**

Fits Eppendorf, Nichiryo, Oxford, Socorex, Titerek, and others.

Orderno	Description	Package Size
B70030	Natural	8 racks of 100 (800)
B70031	Natural, with certificate	8 racks of 100 (800)

3.2 Certified tips

200 µl Extra long tip

type **A**

Prevents "pipette shaft touching" contamination, especially when pipetting tall tubes such as blood collection tubes.
Fits Gilson, Biohit, Eppendorf, Finnpipette, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B74120	Natural	8 racks of 96 (768)
B74120C	Natural, with certificate	8 racks of 96 (768)

200 µl

type **A**

Fits Gilson, Costar, Eppendorf, Excaliber, Finnpipette, Nichiryo, Socorex, Volac, and others.

Orderno	Description	Package Size
B60009	Natural	8 racks of 96 (768)
B60009C	Natural, with certificate	8 racks of 96 (768)

300 µl Graduated tip

type **K**

Fits Gilson, Biohit, Costar, Finnpipette, Nichiryo, Oxford, Titertek, and others.

Orderno	Description	Package Size
B64174	Natural	8 racks of 96 (768)
B64174C	Natural, with certificate	8 racks of 96 (768)

1000 µl Extra long tip 1300 µl

type **M**

Fits Gilson, Eppendorf, Costar, Finnpipette, Nichiryo, Oxford, Socorex, SMI, Titertek, Volac and others.

Orderno	Description	Package Size
B64276	Natural	8 racks of 72 (576)
B64276C	Natural, with certificate	8 racks of 72 (576)

3.3 Low adhesion tips

Low Adhesion Pipette Tips are injection moulded with specially blended resins to minimize liquid retention and ensure optimal sample yield. This advanced technique eliminates the use of lubricants that may be harmful to priceless samples. Tips are autoclavable and ideal for sensitive clinical assays, quantitative analysis, quality control and any other applications where optimal yield and minimal sample loss is required. Advanced moulding, quality control, and packaging systems ensure that these products are free of enzyme and nucleic acid contamination.

10 µl

type **D**

Fits Gilson, Rainin, Eppendorf, Biohit, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
B70560	Natural	bag, 500
B70561	Natural	8 racks of 96 (768)
B70562	Natural, sterile	8 racks of 96 (768)

10 µl

type **C**

Fits Eppendorf, Nichiryo, Oxford, Socorex, Titerek and others.

Orderno	Description	Package Size
B70569	Natural	bag, 500
B70570	Natural	8 racks of 96 (768)
B70571	Natural, sterile	8 racks of 96 (768)

10 µl Nano tip

type **B**

Fits Gilson, Biohit, Eppendorf, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
L70400	Natural	bag, 500
L70401	Natural	8 racks of 96 (768)
L70402	Natural, sterile	8 racks of 96 (768)

10 µl

type **Z0**

Fits Gilson, Biohit, Eppendorf, Finnpipette, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
L75029	Natural	bag, 500
L75030	Natural	8 racks of 96 (768)
L75031	Natural, sterile	8 racks of 96 (768)

3.3 Low adhesion tips

100 µl

type **E**

Fits Eppendorf, Costar, Finnpipette, Nichiryo, Oxford, Socorex, and others.

Orderno	Description	Package Size
L74114	Natural	bag, 500
L74123	Natural	8 racks of 96 (768)
L74117	Natural, sterile	8 racks of 96 (768)

200 µl

type **A**

Fits Gilson, Costar, Eppendorf, Excaliber, Finnpipette, Nichiryo, Socorex, Volac, and others.

Orderno	Description	Package Size
L60002	Natural	bag, 500
L60008	Natural	8 racks of 96 (768)
L60009	Natural, sterile	8 racks of 96 (768)

200 µl Extra long tip

type **A**

Prevents "pipette shaft touching" contamination, especially when pipetting tall tubes such as blood collection tubes.
Fits Gilson, Biohit, Eppendorf, Finnpipette, Nichiryo, Oxford, and others.

Orderno	Description	Package Size
L74109	Natural	bag, 1000
L74110	Natural	8 racks of 96 (768)
L74111	Natural, sterile	8 racks of 96 (768)

300 µl Graduated tip

type **K**

Fits Gilson, Biohit, Costar, Finnpipette, Nichiryo, Oxford, Titertek, and others.

Orderno	Description	Package Size
L71400	Natural	bag, 500
L74173	Natural	8 racks of 96 (768)
L74174	Natural, sterile	8 racks of 96 (768)

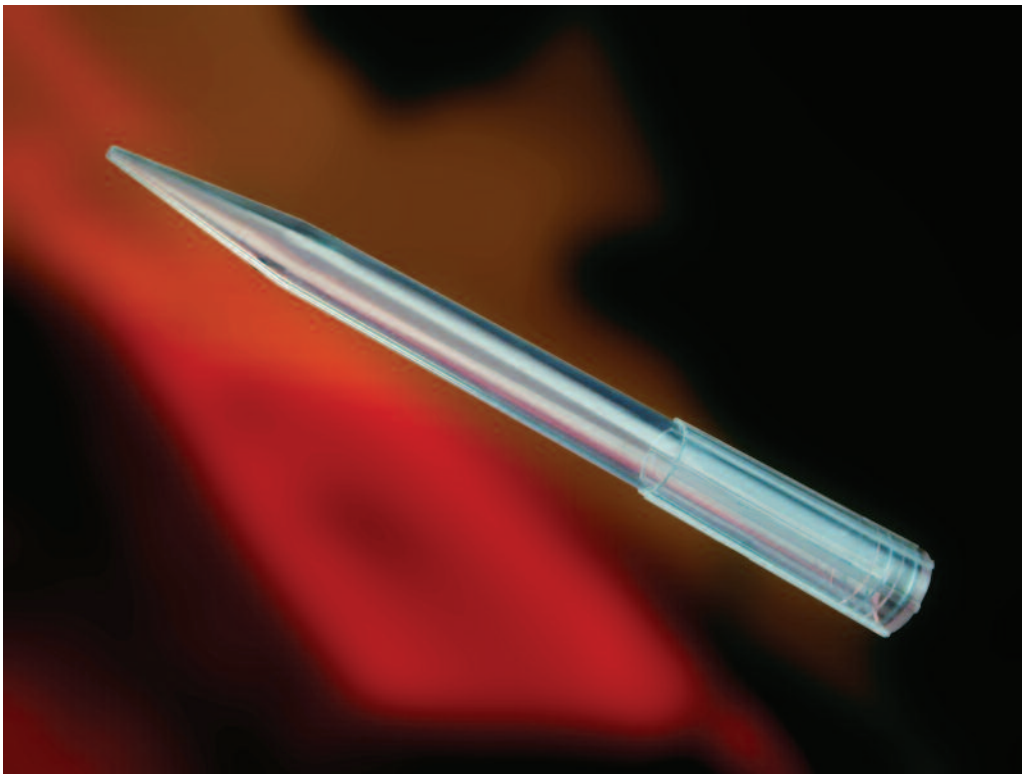
3.3 Low adhesion tips

1000 µl Extra long tip 1300 µl

type **M**

Fits Gilson, Eppendorf, Costar, Finnpipette, Nichiryo, Oxford, Socorex, SMI, Titertek, Volac and others.

Orderno	Description	Package Size
L74271	Natural	bag, 500
L74274	Natural	8 racks of 72 (576)
L74276	Natural, sterile	8 racks of 72 (576)



4. TUBES

Tubes are key components in experiments. Tubes are used to prepare and perform reactions, and to store the final reaction product. Tubes should be of a trustworthy quality, durable, consistent and stable. BIOplastics tubes are manufactured under strict quality controlled conditions. The design ensures smooth inner surfaces, easy closure and reproducible results. Most tubes are made of PP unless otherwise indicated. Depending on type and model, BIOplastics tubes can be frozen down to -200 °C and heated up to 100 °C. BIOplastics Microcentrifuge tubes can be centrifuged up to 20.000 g

Tubes with special features can be found in the relevant chapters.

Tube material and product binding properties

Type of Tubes	Application	Competitor tubes	BIOplastics tubes (M type)	BIOplastics Low Adhesion tubes (O type)
Microcentrifuge tubes 0.5, 1,5 & 2 ml	Binding of DNA %	Up to 5 %	< 1%	< 0.3%
	Binding of proteins %	Up to 6 %	< 1%	< 0.6 %
	Pop-Open @ 99 °C	Yes > 80%	No	No
	Temperature work range °C	Mainly -20 °C to 95 °C	- 80 °C to 100 °C	- 80 °C to 100 °C
Screw cap tubes 0.5, 1,5 & 2 ml	Binding of DNA %	Up to 5 %	< 1%	< 0.3%
	Binding of proteins %	Up to 6 %	< 1%	< 0.6 %
	Accept organic solutions	No > 95%	Yes	Yes
	Temperature work range °C	Mainly -25 °C to 100 °C	- 200 °C to 110 °C	- 80 °C to 110 °C
Titer dilution and storage tubes	Binding of DNA %	Up to 4 %	< 1%	NA
	Binding of proteins %	Up to 4 %	< 1%	NA
	Temperature work range °C	Mainly -25 to 100 °C	-180 to 100 °C	NA

Screw cap tubes and screw cap properties

	Storage <- 60 °C ≥ 3 years	Storage <- 60 °C < 3 years	Incubation ≥ 95 °C ≥ 2 hours	Incubation ≥ 95 °C < 2 hours	Storage > - 40 °C ≥ 3 years	Storage > - 40 °C < 3 years
Regular Screw Cap Tubes with Secure Closure Cap	yes	yes	yes	yes	yes	yes
Regular Screw Cap Tubes with Easy Closure Screw Cap	no	yes	no	yes	no	yes
Low Binding Screw Cap Tubes with Secure Closure Cap	no	no	yes	yes	yes	yes
Low Binding Screw Cap Tubes with Easy Closure Screw Cap	no	no	yes	yes	no	yes

4.1 Microcentrifuge tubes

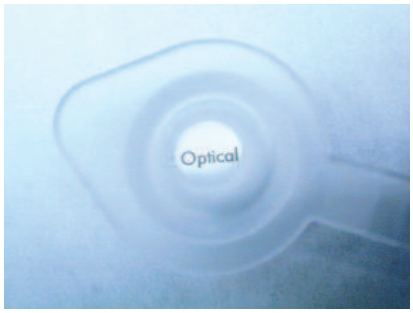
Volume 0.5 ml, Plain

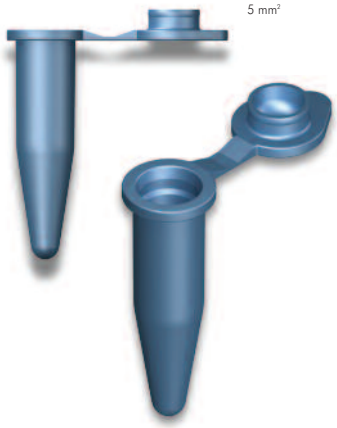
5 mm²

Plain microcentrifuge tube, optical flat cap, frosted writing area on cap, M-type material*. Thick wall (0.7 mm), low fluorescent background, slightly adjusted angle. Domed inside lid.

Orderno	Description	Package Size
R74063	Natural	bag, 1000

R74196	red	R74201	violet
R74197	blue	R74202	amber
R74198	green	R74809	white
R74199	yellow	R71810	black
R74200	orange	R74064	natural, sterile





Volume, 0.5 ml, Graduated

5 mm²

Graduated microcentrifuge tube, secure fitted optical flat cap, frosted writing area, M-type material*. The tubes have graduations at 0.1, 0.2, 0.3, 0.4, 0.5 and 0.6 ml. Domed inside lid.

Orderno	Description	Package Size
B71954	Natural	bag, 1000

B71053	red	B71052	orange
B71050	blue	B71054	violet
B71051	green	B71056	amber
B71055	yellow	B71049	natural, sterile

* M-type material is a blend of PP, optimized for robust general laboratory applications

4.1 Microcentrifuge tubes

Volume 1.5 ml, Graduated

Graduated microcentrifuge tube, secure fitted optical flat cap, frosted writing area, M-type material*. The tubes have graduations at 0.1, 0.5, 1.0 and 1.5 ml. Domed inside lid.

Orderno	Description	Package Size
B74085	Natural	bag, 500

B74286	red	B74291	violet
B74287	blue	B74292	amber
B74288	green	B74009	white
B74289	yellow	B74010	black
B74290	orange	B74011	natural, sterile

Volume 2.0 ml, Graduated

Graduated microcentrifuge tube, secure fitted optical flat top cap, frosted areas. The tubes have graduations at 0.1, 0.5, 1.0, 1.5, and 2.0 ml. Frosted writing area on top and side of the tube, M-type material*. Domed inside lid.

Orderno	Description	Package Size
B71420	Natural	bag, 500

B71421	red	B71425	orange
B71422	blue	B71426	violet
B71423	green	B71427	amber
B71424	yellow	B71428	mixed colored

* M-type material is a blend of PP, optimized for robust general laboratory applications

4.2 Certified tubes

These tubed are certified to be free of any RNA, DNA, RNase or DNase activity and to be pyrogen free. They are available either with or without a certificate.

Volume 0.5 ml

Graduated, secure fitted flat top cap, frosted area, certified, M-type material*. The tubes have graduations at 0.1, 0.2, 0.3, 0.4, 0.5, 0.6 ml. Frosted writing area on top and side of the tube.

Orderno	Description	Package Size
C77500	Natural	bag, 1000
C77501	Natural, with certificate	bag, 1000

Volume 1.5 ml

Graduated, secure fitted flat top cap, frosted area, certified, M-type material*. The tubes have graduations at 0.1, 0.5, 1.0 and 1.5 ml. Frosted writing area on top and side of the tube.

Orderno	Description	Package Size
B77502	Natural	bag, 500
B77503	Natural, with certificate	bag, 500

Volume 2.0 ml

Graduated microcentrifuge tube, secure fitted flat top cap, frosted area, Certified, M-type material*. The tubes have graduations at 0.1, 0.5, 1.0, 1.5 and 2.0 ml. Frosted writing area on top and side of the tube.

Orderno	Description	Package Size
B77504	Natural	bag, 500
B77505	Natural, with certificate	bag, 500

* M-type material is a blend of PP, optimized for robust general laboratory applications

4.3 Low adhesion tubes

Low Adhesion Tubes are injection moulded with specially blended resins to minimize liquid retention and ensure optimal sample yield. This advanced technique eliminates the use of lubricants that may be harmful to priceless samples. Tubes are autoclavable and ideal for sensitive clinical assays, quantitative analysis, stock dilution series, quality control and any other applications where optimal yield and minimal sample loss is required. Advanced moulding, quality control, and packaging systems ensure that these products are free of enzyme and nucleic acid contamination.

Volume 0.5 ml

Graduated microcentrifuge tube, optical flat cap, frosted writing area, low adhesion

The tubes have graduations at 0.1, 0.2, 0.3, 0.4, 0.5, 0.6 ml. The resins used during the moulding prevent any protein binding, even small amounts, to the polypropylene surface. All sensitive protein working procedures can be done in these tubes. Domed inside lid.

Orderno	Description	Package Size
B74029	Natural, low adhesion, graduated	bag, 500
B64029	Natural, low adhesion, non graduated	bag, 500

Volume 1.5 ml

Graduated microcentrifuge tube, optical flat cap, frosted writing area, low adhesion

The tubes have graduations at 0.1, 0.5, 1.0 and 1.5 ml. The resins used during the moulding prevent any protein binding, even small amounts, to the polypropylene surface. All sensitive protein working procedures can be done in these tubes. Domed inside lid.

Orderno	Description	Package Size
B74030	Natural, low adhesion, graduated	bag, 250
B64030	Natural, low adhesion, non graduated	bag, 250

Volume 2.0 ml

Graduated microcentrifuge tube, secure fitted optical flat top cap, frosted writing area, low adhesion. The tubes have graduations at 0.1, 0.5, 1.0, 1.5 and 2.0 ml ml. The tubes of excellent quality have flat top caps with frosted writing area on top and side of the tube. The caps of these tubes have a good tight fit. The resins used during the moulding prevent any protein binding, even small amounts, to the polypropylene surface. All sensitive protein working procedures can be done in these tubes. Domed inside lid.

Orderno	Description	Package Size
B74035	Natural, low adhesion, graduated	bag, 500

4.4 Technical background screw cap tubes (-200°C to 110°C)

BIOplastics Screw Cap Tubes are an excellent means of storage. They are made of polypropylene, with frosted writing areas and with a plain, homogeneous surface at the inside. Screw Cap Tubes are catagorized into three different volumes: 0.5 ml, 1.5 ml and 2.0 ml. Screw Cap Tubes are available as conical or free standing and sterile as well as non-sterile. The screw cap tubes have a working range of -200°C to 110°C and can be centrifuged up to 20.000 g.

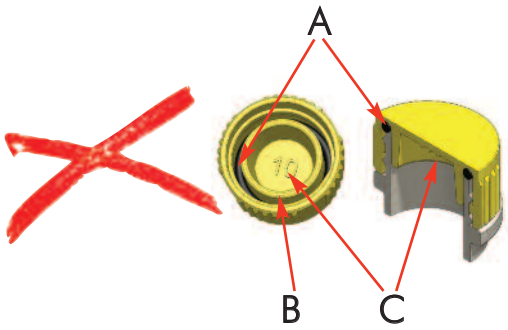
Srew cap closure technology

BIOplastics recently introduced a new innovative product, Screw Cap Tubes with Smart Secure Closure Technology, which is resulting in superior Screw Cap Tubes. The screw caps are designed in a way that the use of "old fashioned" rubber rings has become obsolete since its performance is superior, when compared to regular screw cap tubes. The absence of a rubber ring assures that the closure is not affected when in contact with organic solvents nor that leakage occurs due to hardening and unbalanced shrinkage caused by low and high temperatures and pressure. The new Smart secure closure design allows frequent opening and closing, even in extreme conditions, without compromising the closure and avoiding leakage.

Colored screw cap tubes and colored screw caps

The marketplace uses natural colored screw cap tubes with colored caps. In some cases screw cap tubes are used with the caps attached to the tubes to prevent contamination of similar tubes by means of mixing up caps. However pipetting with an attached lid is not optimal since the spacing of tubes, the overall footprint, and the chance of touching the inner part of the cap are all major drawbacks. To overcome these drawback and prevent cross contamination, we have not only colored our screw caps but also offer screw cap tubes in 10 different colors. BIOplastics is the first company in the world offering COLORED SCREW CAP TUBES AND COLORED SCREW CAPS which enable not only a wide variety of color coded combinations (colored tube and colored cap) but also significantly reduces the chance of cross contamination caused by mixing up incorrect colored cap to tube closure.

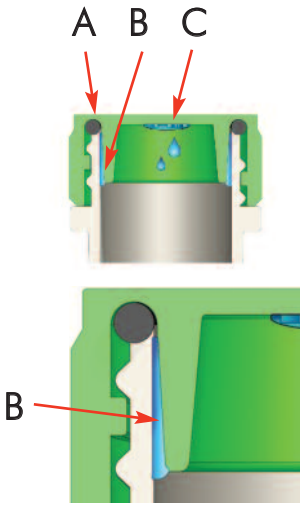
OLD TRADITIONAL SCREW CAP TUBES AND CAP WITH O-RINGS



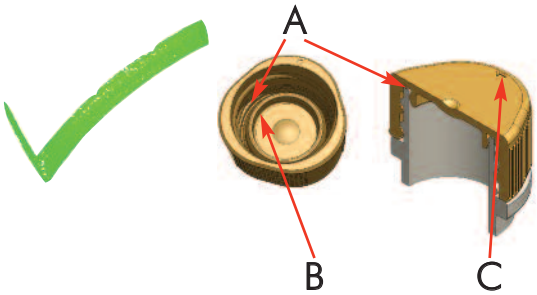
A: Rubber ring, may contaminate your sample, dissolves in organic solutions, become brittle in time and may break at lower temperatures

B: Inner cylinder sitting in the tube and causing loss of sample, inconsistency of result and increases contact sample to tub surface

C: Cavity number inside the cap: source of binding and contamination



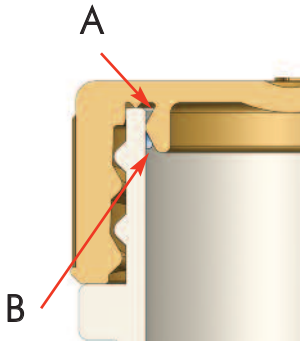
SCREW CAP TUBES AND CAPS WITH SMART SECURE CLOSURE TECHNOLOGY



A: Smart closure, avoids sample contaminate, withstands organic solutions, remains soft at extreme low and high temperatures

B: Absence of cylinder sitting in the tube assures maximum sample recovery, consistency of result and decreases contact sample to tube surface

C: Cavity number outside of the cap avoids binding and contamination



4.4 Technical background screw cap tubes (-200°C to 110°C)

Tube and cap facts. Why and how it works better for you.

Triangular cap:
- decreases chance of rolling away
- easy handling & holding in hand

Smart closure:
- avoids sample contamination
- remains soft at extreme low and high temperatures
- enables the use of organic solvents
- assures no leakage

Absence of cylinder sitting in the tube:
- assures maximum sample recovery, consistency of results and decreases contact sample to tube surface

No logo at inner side of cap:
- avoids sticking of molecules in corners and reducing total contact surface

Secure closure and easy closure cap range for screw cap tubes

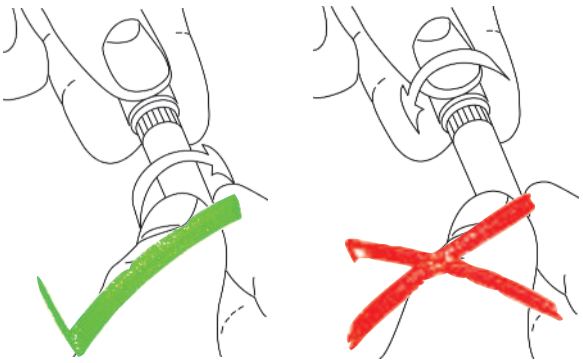
Screw caps for screw cap tubes are offered in two selectable versions: The regular Secure Closure and the new Easy Closure Screw Cap.

For robust applications such as long term storage: ≥ 3 years below - 80 °C or incubation at ≥ 95 °C for ≥ 2 hours, one should opt for the regular Secure Closure Caps. For less robust applications: ≤ 3 years higher than -80 °C or less stringent incubation ≤ 100 °C ≤ 1.5 hours, one can opt for the Easy Closure Cap. Both types of caps incorporate BIOplastics' non leaking Smart Closure Cap Technology.
The Easy Closure Cap is produced from a completely different material. All types of screw caps and screw tubes are offered in 10 different colors, DNase. RNase, Pyrogen, Metal and ATP free.

	Storage <- 80 °C ≥ 3 years	Storage <- 80 °C < 3 years	Incubation ≥ 95 °C ≥ 2 hours	Incubation ≥ 95 °C < 2 hours	Storage > - 40 °C ≥ 3 years	Storage > - 40 °C < 3 years
Regular Screw Cap Tubes with Secure Closure Cap	yes	yes	yes	yes	yes	yes
Regular Screw Cap Tubes with Easy Closure Screw Cap	no	yes	no	yes	no	yes
Low Binding Screw Cap Tubes with Secure Closure Cap	no	no	yes	yes	yes	yes
Low Binding Screw Cap Tubes with Easy Closure Screw Cap	no	no	yes	yes	no	yes

HOW TO OPEN AND CLOSE THE TUBES EASILY

This is how you do it.....
SCREW THE TUBE TO THE CAP instead of the cap to the tube



4.5 Screw cap tubes (-200°C to 110°C)

BIOplastics Screw Cap Tubes are an excellent means of storage. They are made of polypropylene, with a light frosted easy "write on" outer surface and a plain, homogeneous surface at the inside. Screw Cap Tubes are catagorized into three different volumes: 0.5 ml, 1.5 ml and 2.0 ml. Screw Cap Tubes are available as conical or free standing and sterile as well as non-sterile. They can be frozen down to -200 °C and centrifuged up to 20.000 g.

0.5 ml Screw cap tubes

Conical (without screw caps)

Orderno	Description	Package Size
B71057	Natural, 0.5 ml conical screw cap tube	bag, 500

B91002	red	B91005	yellow	B91008	amber	B91011	natural, sterile
B91003	blue	B91006	orange	B91009	white	B91012	SW colors
B91004	green	B91007	violet	B91010	black		

Free standing (without screw caps)

Orderno	Description	Package Size
B71060	Natural, 0.5 ml free standing screw cap tube,	bag, 500

B91032	red	B91035	yellow	B91038	amber	B91041	natural, sterile
B91033	blue	B91036	orange	B91039	white	B91042	SW colors
B91034	green	B91037	violet	B91040	black		

1.5 ml Screw cap tubes

Conical (without screw caps)

Orderno	Description	Package Size
B71058	Natural, 1.5 ml conical screw cap tube	bag, 500

B91102	red	B91105	yellow	B91108	amber	B91111	natural, sterile
B91103	blue	B91106	orange	B91109	white	B91112	SW colors
B91104	green	B91107	violet	B91110	black		

Free Standing (without screw caps)

Orderno	Description	Package Size
B71061	Natural, 1.5 ml free standing screw cap tube	bag, 500

B91132	red	B91135	yellow	B91138	amber	B91141	natural, sterile
B91133	blue	B91136	orange	B91139	white	B91142	SW colors
B91134	green	B91137	violet	B91140	black		

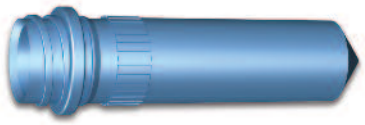
4.5 Screw cap tubes (-200°C to 110°C)

2.0 ml Screw cap tubes

Conical (without screw caps)

Orderno	Description	Package Size
B91201	Natural, 2.0 ml conical screw cap tube	bag, 500

B91202	red	B91205	yellow	B91208	amber	B91211	natural, sterile
B91203	blue	B91206	orange	B91209	white	B91212	SW colors
B91204	green	B91207	violet	B91210	black		



Free standing (without screw caps)

Orderno	Description	Package Size
B71072	Natural, 2.0 ml free standing screw cap tube	bag, 500

B91232	red	B91235	yellow	B91238	amber	B91241	natural, sterile
B91233	blue	B91236	orange	B91239	white	B91242	SW colors
B91234	green	B91237	violet	B91240	black		

4.6 Screw caps

Screw caps with secure closure

By using screw caps with Secure Closure Technology excellent closure of the tubes is guaranteed. Screw caps are available in nine different colors. For use with all 0.5 ml, 1.5 ml and 2.0 ml screw cap tubes.

Orderno	Description	Package Size
B91300	Natural, screw cap	bag, 500

B91302	red	B91305	yellow	B91308	amber	B91311	natural, sterile
B91303	blue	B91306	orange	B91309	white		
B91304	green	B91307	violet	B91310	black		

Easy closure screw caps

Easy Closure PE cap with Secure Closure Technology. Allows one hand opening and closure Available in nine different colors. For use with all 0.5 ml, 1.5 ml and 2.0 ml screw cap tubes.

Orderno	Description	Package Size
B91400	Natural, Easy Closure screw cap	bag, 500

B91402	red	B91405	yellow	B91408	amber	B91411	natural, sterile
B91403	blue	B91406	orange	B91409	white		
B91404	green	B91407	violet	B91410	black		

For specific properties see table on page 91.

4.7 Extra low binding screw cap tubes

BIOplastics' extra low binding screw cap tubes are an excellent means of storage and are available in 3 three different volumes: 0.5 ml, 1.5 ml and 2.0 ml. The specific extra low binding properties of the raw material blend limits the working range. (see tabel on page 91)
Low binding screw cap tubes can handle a temparature range of -80°C to 110°C and can be centrifuged up to 20.000 g.

Conical (without screw caps)

Orderno	Description	Package Size
B71057U	Natural, 0.5 ml conical screw cap tube, extra low binding	bag, 500
B71058U	Natural, 1.5 ml conical screw cap tube, extra low binding	bag, 500
B91201U	Natural, 2.0 ml conical screw cap tube, extra low binding	bag, 500

Free standing (without screw caps)

B71060U	Natural, 0.5 ml free standing screw cap tube, extra low binding	bag, 500
B71061U	Natural, 1.5 ml free standing screw cap tube, extra low binding	bag, 500
B71072U	Natural, 2.0 ml free standing screw cap tube, extra low binding	bag, 500

See properties charts (page 91) or the interactive options at www.bioplastics.com.

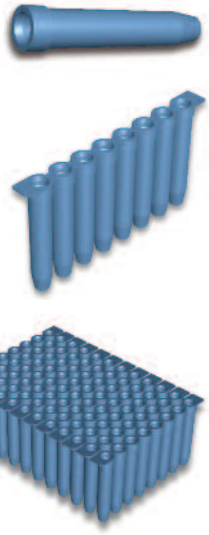
4.8 Titer dilution storage tubes and systems (-200°C to 110°C)

Dilution storage tubes and systems are designed for multi purpose usage. The tubes are extra robust, can hold 0.5 ml, have an extraordinary working range of -200 °C to 110 °C and can be centrifuged up to 20.000 g. The tubes are availabe in a single version, an 8 strip version, as well as a 96 well version. All tubes can be stored in the BIOplastics regular Work Rack S-96 System. All tubes can be closed using the extra robust EU Indented Flat 8 Cap-Strip (B75701), Indented Flat 12 Cap-Strip (B56501), and EU Indented Flat Cap Plate 96 Format (B57501).

Uniquely coded strip-tubes and tube plates
Using BIOplastics BPLPM technology, products can be individually and uniquely coded. The regular titer dilution and storage tubes already contain the BPLPM technology mix. These products can be laser coded by YAC laser, which also allows BIOplastics to offer uniquely coded strip-tubes and tube plates. Each tube has a unique, in product labeled, non removable ID#. Specific codes or customized marked products are available on demand.

Titer dilution and storage tubes


Actual size



Single Tubes

Orderno	Description	Package Size
B74056	Natural, 0.5 ml Dilution and Storage tubes	bag, 1000

8-strip Tubes

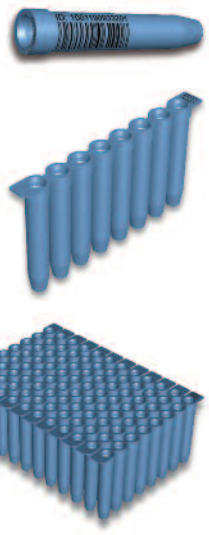
Orderno	Description	Package Size
B74156	Natural, 0.5 ml Dilution and Storage 8-strip tubes	300 strips

96 interconnected Tube-plate

Orderno	Description	Package Size
B74256	Natural, 0.5 ml Dilution and Storage 96 inter connected tube-plate	12 plates
B74257	Natural, 0.5 ml Dilution and Storage 96 inter connected tube-plate, racked in box	8 boxes

Laser mark coded titer dilution and storage tubes


Actual size



Single tubes

Orderno	Description	Package Size
B74056L	Natural, 0.5 ml Dilution and Storage tubes	5 bags of 50 tubes each

8-Strip tubes

Orderno	Description	Package Size
B74156L	Natural, 0.5 ml Dilution and Storage 8-strip tubes	120 strips

96 Interconnected tube-plate

Orderno	Description	Package Size
B74256L	Natural, 0.5 ml Dilution and Storage 96 inter connected tube-plate	12 plates
B74257L	Natural, 0.5 ml Dilution and Storage 96 inter connected tube-plate, racked in box	8 boxes

5. RACKS AND STORAGE

The correct storage of samples on the laboratory bench, in the refrigerator, or in the freezer increases the reliability of experiments and their results. BIOplastics offers a broad range of racks for (q)PCR, storage boxes and work racks. They do not only improve your sample archivation level, but also brighten up your laboratory with vibrant colors.

5.1 (q)PCR Multo work racks and systems

0.2 ml Multo work rack

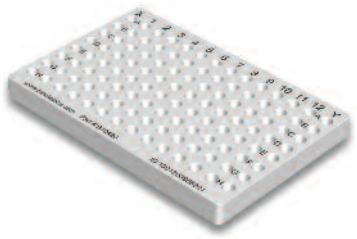
This bench work rack named Multo Rack, is made of very robust poly-propylene and can hold qPCR tubes, strips and plates. It holds the microtiter plate format (8 x 12, A to H 1-12) and has 2 additional columns. The multo rack therefore holds, 14 x 8-tube strips, 112 single tubes or one plate. The extra 16 wells as can be used as "master vial" position when pipetting plates. Low profile ABI plates can be positioned within the footprint of the Multo Rack. The Multo Rack can be used as a Work, Storage, Freezer or Cryo Storage Rack. Systems are available in 8 colors and are "In Product" marked and coded.

0.2 ml Multo work rack system

The multo rack systems contains a 0.2 ml work rack and a multo rack box. The multo rack box is an assembly of the base and the lid. The base and lid have a "Click-In" feature to become the multo box. The multo rack system is used as a work, storage, freezer or cryo storage system.The multo rack system accepts any (q)PCR vessel or plate and the Multo Rack Box closes securely. The height of 3 cm (1.2 Inch) enables the multo systems to be used for kit packaging as well as a shipping system for valuable samples.

0.2 ml Multo work rack

Rack only
Dimensions: 128.4 mm (W) x 85.9 mm (L) x 10.3 mm (H)



Orderno	Description	Package Size
B10420	Natural, Multo Rack only, Laser Marked Coded	8 Racks

B10422	red	B10426	orange
B10423	blue	B10427	violet
B10424	green	B10429	white
B10425	yellow	B10432	Mixed Colors

0.2 ml Multo work rack system

Dimensions Multo Work rack System:
Multo Rack, 128.4 mm (W) x 85.9 mm (L) x 10.3 mm (H)
Multo Box footprint, 134.8 mm (W) x 92.8 mm (L)
Multo Box Maximum, 135 mm (W) x 103.6 mm (L) x 27.7 mm (H)

Orderno	Description	Package Size
B10440	Natural, Multo Rack in box with lid, Laser Marked Coded	8 Racks

B10442	red	B10446	orange
B10443	blue	B10447	violet
B10444	green	B10449	white
B10445	yellow	B10452	Mixed Colors

5.1 (q)PCR Multo work racks and systems

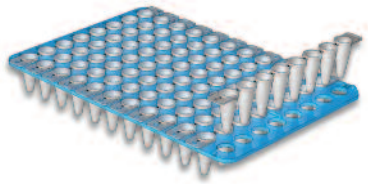
0.2 ml Multo work rack box

Box only. Colored products have a colored base and a transparent, natural lid.
Dimensions: 135 mm (W) x 103.6 mm (L) x 27.7 mm (H)

Orderno	Description	Package Size
B10400	Natural, Multo Rack Box	8 boxes

B10401	red	B10405	orange
B10402	blue	B10406	violet
B10403	green	B10409	white
B10404	yellow	B10412	Mixed Colors

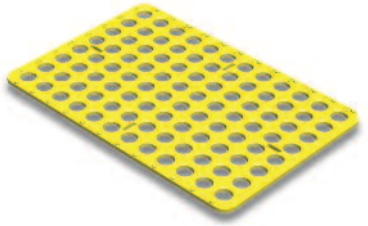
Tube support grid, make your own plate



Tube support grid holds plates, strips or individual tubes. The tube support grids are available in two formats (regular and wide) and in a range of colors, are alphanumerically marked and have knobs to fix EU tubes, strips and plates. Once the tube strips or plates are positioned, and after pipetting the required reagents, the Tube Support Grid is used as a carrier which can be placed in the thermal cycler, during the pre- and post cycling process. Furthermore they can be positioned in Multo Work rack box and system

Support grid: 11.3 cm (L) x 7.6 cm (W) x 0.15 cm (H)
4.48 inch (L) x 2.99 inch (W) x 0.06 inch (H)

Regular Area

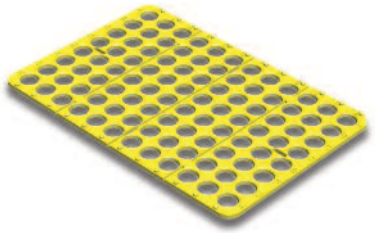


(use with any product except “click on” strip-cap,and C7... tubes and C7....tube strips)

Orderno	Description	Package Size
B69301	Regular Pre-Post Tube support grid, can hold either EU Plates or tubes (strips), natural	8 grids

B69302	red	B69304	green	B69309	white
B69303	blue	B69305	yellow	B69310	black

Wide Area



(use with “click on” strip-cap, color coding plates, C7... tubes and C7....tube strips)

Orderno	Description	Package Size
B69351	Wide version Pre-Post Tube support grid, can hold either EU Plates or tubes (strips), natural	8 grids

B69352	red	B69354	green	B69359	white
B69353	blue	B69355	yellow	B69360	black

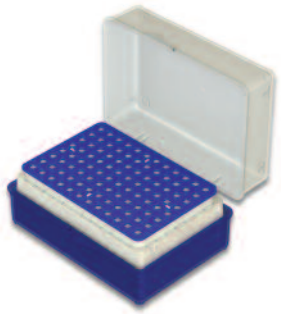
5.2 Handling, storage boxes and inserts, Small Footprint

BIOplastics Work racks offer ultimate flexibility on the laboratory bench. Work racks are available in a number of formats and sizes and can be used as a single unit or placed in a appropriate box with lid. The Station box-S, Work Racks as well as Station boxes are stackable. Constructed of durable polypropylene, Work racks as well as Station boxes can be autoclaved or disinfected if required.

Dimensions	Work Rack S:	12.3 cm (L) x 8.4 cm (W) x 4.5 cm (H)
	Work Rack F:	13.2 cm (L) x 13.2 cm(W) x 4.4 cm (H)
	Station Box S:	13.1 cm (L) x 9.2 cm (W) x 6.2 cm (H)
	Station Box F:	14.3 cm (L) x 14.3 cm(W) x 5.9 cm (H)

Work Racks are alphanumerically marked and can also be used as refrigerator or freezer storage racks.

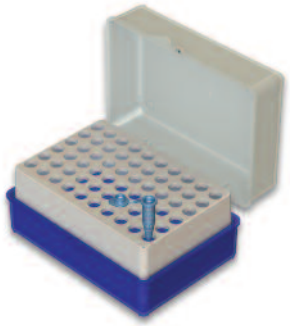
Work rack S-96 (96 x 0.2 ml PCR and 96 x 0.5 ml titer tubes)



Holds 96 x 0.2 ml PCR tubes, strips and plates as well as 96 titer tubes
Box Rack: 13.1 cm (L) x 9.2 cm (W) x 6.2 cm (H) (hinge not included in dimensions)
Contains Work rack 96 placed in Station box-S.

Orderno	Description	Package Size
B79301	Work-Rack S-96 S with lid, natural and blue	8 boxex

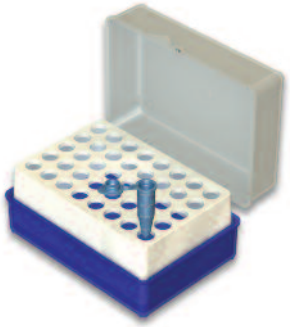
Work rack S-60 system (60 x 0.5 ml)



For 60 x 0.5 ml microcentrifuge tubes, 13.1cm (L) x 9.2 cm (W) x 6.2 cm (H), stackable
Contains work rack 60 placed in Station box-S.

Orderno	Description	Package Size
B10033	Work-Rack S-60 S with lid, natural and blue	8 boxes
B10034	Work-Rack S-60 S with lid, natural and green	8 boxes

Work rack S-40 system (40 x 1.5/2 ml)



For 40 x 1.5 ml and 2 ml microcentrifuge tubes. 13.1 cm (L) x 9.2 cm (W) x 6.2 cm (H)
Contains work rack 40 placed in station box-S.

Orderno	Description	Package Size
B10053	Work-Rack S-60 S with lid, natural and blue	8 boxes
B10054	Work-Rack S-60 S with lid, natural and green	8 boxes

BIOplastics storage boxes allow visual examination of the box contents without removing the lid. The boxes are manufactured with durable polypropylene, which does not have the problem of becoming water saturated like cardboard boxes. The autoclavable, unbreakable design provides convenient storage for microcentrifuge tubes and cryo vials. Dimension: 14.3 cm (L) x 14.3 cm (W) x 5.9 cm (H)

5.2 Handling, storage boxes and inserts, Small Footprint

Work rack S stand alone units without Station box

Work rack S-96
(For 96 x 0.2 ml (q)PCR tubes, strips or plates or 96 x 0.5 ml titer tubes)

Orderno	Description	Package Size
B69409	Work Rack S-96, white	8 inserts

Work rack S-40 (40 x 1.5 ml/2 ml)
For 40 x 1.5 ml and 2 ml microcentrifuge tubes, 12.3 cm (L) x 8.4 cm (W) x 4.5 cm (H), stackable. Alphanumerically marked, stand alone unit without Station box-S.

Orderno	Description	Package Size
B10099	Work-Rack S-40, white	8 racks

Work rack S-60 (60 x 0.5 ml)
For 60 x 0.5 ml microcentrifuge tubes, 12.3 cm (L) x 8.4 cm (W) x 4.5 cm (H), stackable. alphanumerically marked, stand alone unit without Station Box-S.

Orderno	Description	Package Size
B10079	Work-Rack S-60, White	8 racks

Station box-S

Station Box S: 13.1 cm (L) x 9.2 cm (W) x 6.2 cm (H)

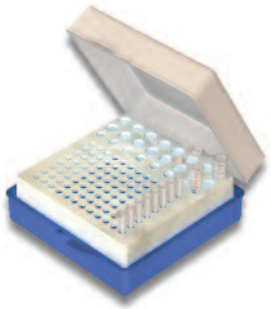
Orderno	Description	Package Size
B10110	EU Station box with lid, standard model, natural	8 boxes

5.3 Handling, storage boxes and inserts, Regular Footprint

BIOplastics storage boxes allow visual examination of the box contents without removing the lid. The boxes are manufactured with durable polypropylene, which does not have the problem of becoming water saturated like cardboard boxes. The autoclavable, unbreakable design provides convenient storage for microcentrifuge tubes and cryo vials. Can also be used as refrigerator or freezer storage racks (down to -180 °C) BIOplastics Work Racks are stackable and offer ultimate flexibility on the laboratory bench.

Dimensions
Work Rack F: 13.2 cm (L) x 13.2 cm (W) x 4.4 cm (H)
Station Box F: 14.3 cm (L) x 14.3 cm (W) x 5.9 cm (H)

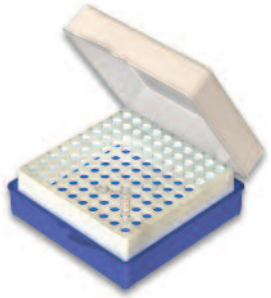
Work rack F combo I System (96 x 0.2 + 16x 1.5/2ml + 8 x 0.5 ml)



Holds 96 x 0,2 ml PCR tubes, strips or plate, 16 x 1.5/2 ml tubes and 8 x 0.5 ml tubes
Contains Work Rack Combo I placed in Station Box F: 14.3 cm (L) x 14.3 cm (W) x 5.9 cm (H)

Orderno	Description	Package Size
B10193	Work-Rack F 100 Combo 1with lid, natural and blue	8 Boxes

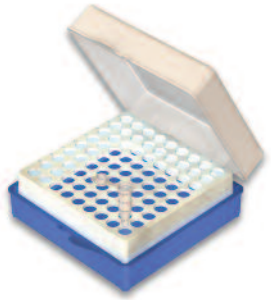
Work rack F 100 system (100 x 0.5 ml)



For 100 x 0.5 ml microcentrifuge tubes
Contains Work Rack F-100 placed in Station Box F: 14.3 cm (L) x 14.3 cm (W) x 5.9 cm (H)

Orderno	Description	Package Size
B10343	Work-Rack F 100 positions for 0.5 ml cryo storage box, natural and blue	8 Boxes

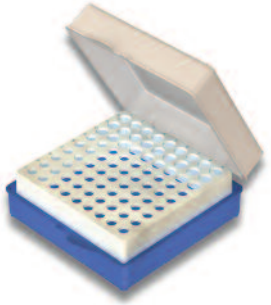
Work rack F 81 system (81 x 1.5/2 ml)



For 81 x 1.5/2 ml ml microcentrifuge tubes
Contains Work Rack F-81 placed in Station Box F: 14.3 cm (L) x 14.3 cm (W) x 5.9 cm (H)

Orderno	Description	Package Size
B10363	Work-Rack F 81 positions for 1.5/2 ml cryo storage box, natural and blue	8 boxes

Work rack F combo 2 system (27 x 1.5/2 ml & 45 x 0.5 ml)



Holds 3 rows of 9 x 1.5/ 2 ml tubes and 6 rows of 9 x 0.5 ml tubes
Contains Work Rack Combo II placed in Station Box F: 14.3 cm (L) x 14.3 cm (W) x 5.9 cm (H)

Orderno	Description	Package Size
B10213	Work-Rack F combo II with lid, natural and blue	8 boxes

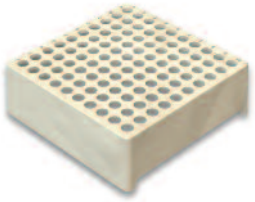
5.3 Handling, storage boxes and inserts, Regular Footprint

Work rack F combo I (96 x0.2, 8 x 0.5 & 16 x 1.5/2 ml)

Holds 96 x 0,2 ml PCR tubes, strips or plate, 16 x 1.5/2 ml tubes and 8 x 0.5 ml tubes 13.2 cm (L) x 13.2 cm (W) x 4.4 cm (H), stackable, Alphanumerically marked, stand alone unit without Station box F.

Orderno	Description	Package Size
B10279	Work-Rack F Combo I, white	8 racks

Work rack F 100 (0.5 ml)



For 100 x 0.5 ml microcentrifuge tubes, 13.2 cm (L) x 13.2 cm (W) x 4.4 cm (H), stackable Alphanumerically marked, stand alone unit without Station box F.

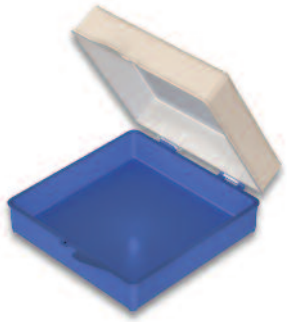
Orderno	Description	Package Size
B10239	Work-Rack F100, white	8 racks

Work rack F 81 (1.5 ml/2 ml)

For 81 x 1.5/2 ml microcentrifuge tubes, 13.2 cm (L) x 13.2 cm (W) x 4.4 cm (H), stackable, Alphanumerically marked, stand alone unit without Station box F.

Orderno	Description	Package Size
B10259	Work-Rack F81, white	8 racks

Station box-F

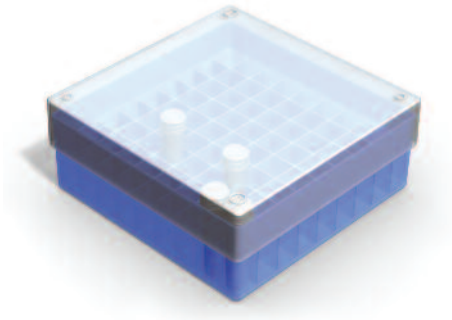


Station Box F, 14.3 cm (L) x 14.3 cm (W) x 5.9 cm (H) , stackable, frosted sides clear top and bottom. Hinged lid.

Orderno	Description	Package Size
B10319	Station Box-F with lid,	8 boxes

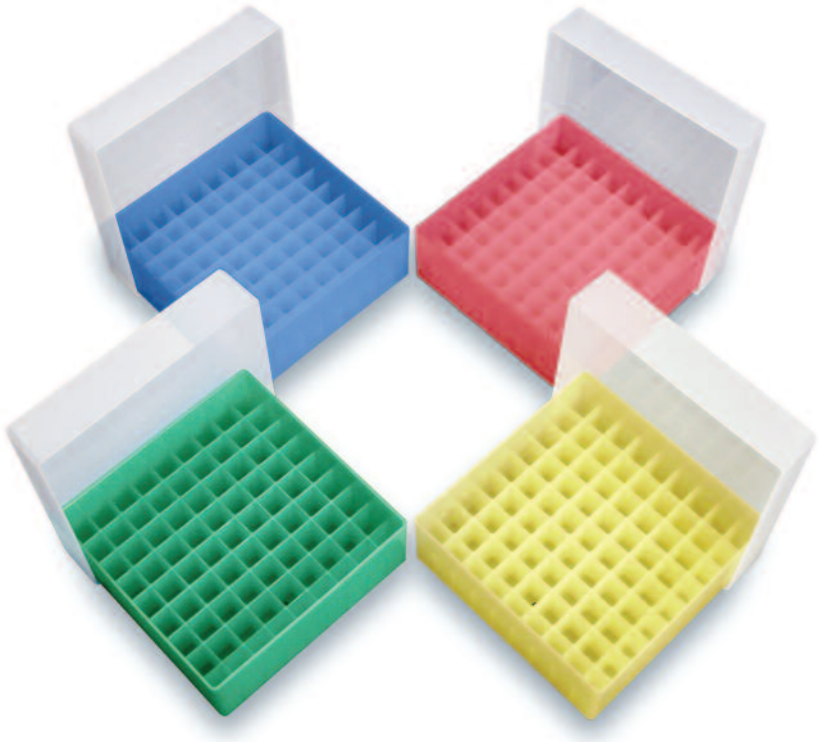
5.4 (Cryo) Storage boxes (-200°C to 110°C)

Work rack F 81 (1.5 ml/2 ml)



BIOplastics cryo storage boxes allow visual examination of the box contents through the lid. The boxes are manufactured with durable polypropylene, which does not have the problem of becoming water saturated like cardboard boxes. The autoclavable, unbreakable design provides convenient storage for micro centrifuge tubes and cryo vials. The boxes can be stacked and have telescopic lids. They are available in different colors. Working range from ambient temperatures up to 110°C and down to -200°C. Accommodates all commonly used centrifuge and cryo tubes and fits most (Cryo) Storage rack systems.

Outer dimensions: 13.0 cm (L) x 13.0 cm (W) x 4.5 cm (H)



Cryo storage box 81 position

Outer dimensions: 13.0 cm (L) x 13.0 cm (W) x 4.5 cm (H)
Working range from ambient temperatures up to 110 °C and down to -200°C.

Orderno	Description	Package Size
B10016	Cryo Storage Box 81 position, Natural	Box of 5
B10017	Cryo Storage Box 81 position, Red	Box of 5
B10018	Cryo Storage Box 81 position, Yellow	Box of 5
B10020	Cryo Storage Box 81 position, Green	Box of 5
B10021	Cryo Storage Box 81 position, Blue	Box of 5

For Cryo Storage Tubes see Screw Cap Tubes (page 98-99) and Titer Tubes (page 101).

6. LASER CODED PRODUCTS

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
Cycler Adaptor overview at Page 59.

6.0 Laser mark and barcoded products

In product coding and labeling with BIOplastics BPLPM technology

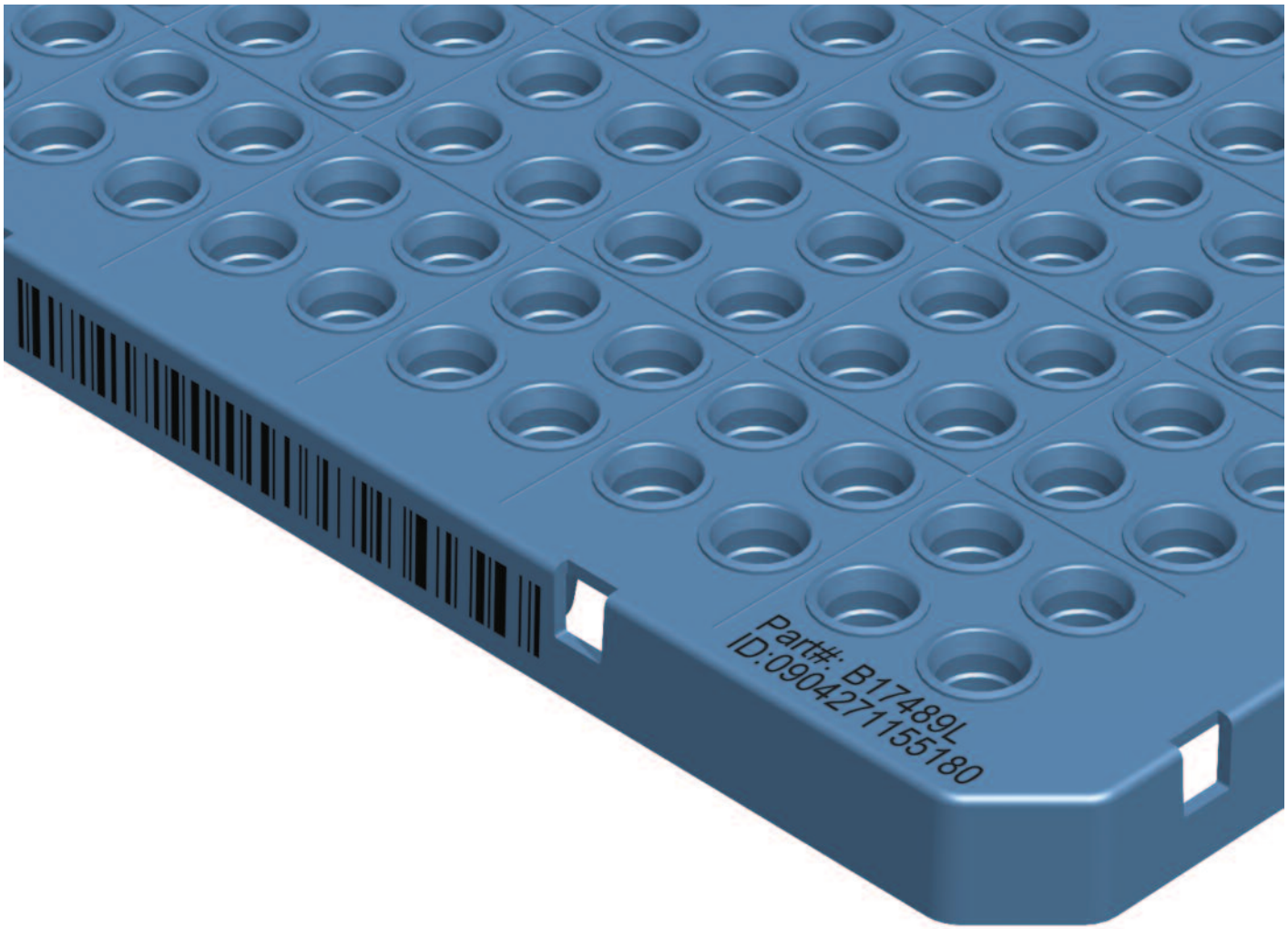
One of BIOplastics' latest innovations is the incorporation of micro particles in a selected range of products.
The BPLPM technology (BIOplastics particle mix) products are offered in addition to the regular range of products. The inert particles, by nature, increase signal to noise ratios in Real-Time PCR applications. BPLPM provides indelible IN PRODUCT labeling and identification. While others use ink, stamps, or dyes containing organic solutions or stickers, BIOplastics' BPLPM technology results in a non-removable, unique marking and coding of the product. No writing with markers, no mistakes, no removal of marks, no double identification numbers; just use the unique ID# at the beginning of your process. Link the unique ID# to your Lab LIMS system and samples.

Accredited labs and diagnostic applications

BPLPM technology is particularly useful for accredited labs in pre-diagnostic and diagnostic settings to improve procedures and reduce the risk of label failures. Depending on volumes, custom layouts and customized codes are available, and have proven useful for forensic labs as well as kit manufacturers to effectively trace products and applications.

Eliminate ID# mistakes by using uniquely coded tubes, strips and plates

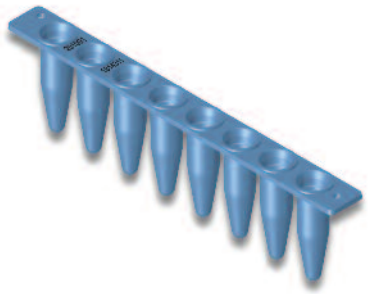
Using BIOplastics' BPLPM technology, products can be individually and uniquely coded. Any product can have a unique ID#. Specific codes or customized marked products are available on demand.



6.1.0 (q)PCR 8 and 12-tube strips, regular profile, Laser Mark Coded

EU 0.2 ml Light frosted thin-wall 8-tube strip extra robust, Regular Profile

White

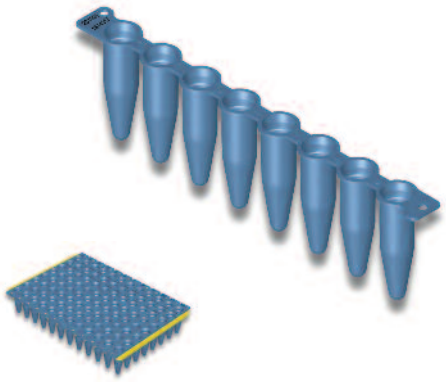


Fits almost all cycler models and qPCR cycler models which accept regular profile products (e.g. ABI, Bio-Rad, Eppendorf, Agilent-Stratagene). Closure can be accomplished with any EU 8-cap strip. For qPCR use B57801or B79701 cap strips.

Orderno	Description	Package Size
B69901L	EU 0.2ml Thin-wall 8-tube strip, Extra Robust, RP, Laser Mark Coded, natural	10 grids hold 120 strips
B69909L	EU 0.2ml Thin-wall 8-tube strip, Extra Robust, RP, Laser Mark Coded, white	10 grids hold 120 strips

EU 0.2 ml Light frosted thin-wall 8-tube strip, Regular Profile

White

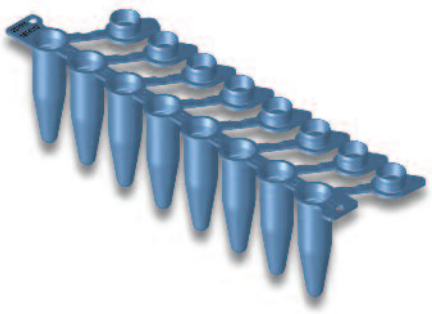


Fits almost all cycler models and qPCR cycler models which accept regular profile products (ABI, Bio-Rad, Eppendorf, Agilent-Stratagene). This strip can be used in combination with the 8-Single attachable Indented Cap strip. Closure can be accomplished with any EU 8-cap strip. For qPCR use B57801, B79701 cap strips or B79501 EU 8-Single attachable Indented Cap.

Orderno	Description	Package Size
B77101L	EU 0.2ml Thin-wall 8-tube strip, RP, LF, Laser Marked Coded, natural	10 grids hold 120 strips
B77109L	EU 0.2ml Thin-wall 8-tube strip, RP, LF, Laser Marked Coded, white	10 grids hold 120 strips

EU 0.2 ml Thin-wall 8-tube strip with single attached optical indented wide area cap, Regular Profile

12.6 mm²



Fits almost all cycler models and qPCR cycler models which accept regular profile products (e.g. ABI, Bio-Rad, Eppendorf, Agilent-Stratagene). See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.

Orderno	Description	Package Size
B72911L	EU 0.2 ml Thin-wall 8-tube strip, Regular Profile, Laser Mark Coded, natural	bag 120 strips

Not available in the USA, alternative for the USA: B79501 + B77101

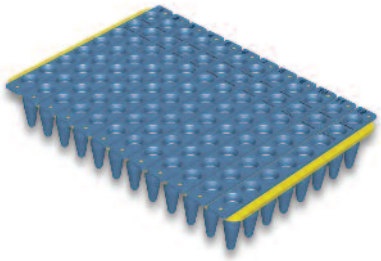
6.1.0 (q)PCR 8 and 12-tube strips, regular profile, Laser Mark Coded

EU 0.2 ml Light frosted thin-wall 12-tube strip extra robust, (Regular Profile)

White

Fits almost all cycler models and qPCR cycler models which accept regular profile products (e.g. ABI, Bio-Rad, Eppendorf, Agilent-Stratagene). See Cycler to Product charts (see tables on page 26 - 29) Closure can be accomplished with any EU 12-cap strip.
For qPCR use B57821 cap strips.

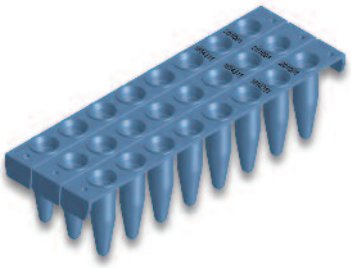
Orderno	Description	Package Size
B56601L	EU 0.2ml Thin-wall 12-tube strip, ER, LF, Laser Marked Coded, natural	10 grids hold 80 strips
B56609L	EU 0.2ml Thin-wall 12-tube strip, ER, LF, Laser Marked Coded, white	10 grids hold 80 strips



6.1.1 (q)PCR 24 plate, regular profile, Laser Mark Coded

EU Semi-skirted (q)PCR thin-wall 24 x 0.2 ml light frosted plate, (Regular Profile)

White



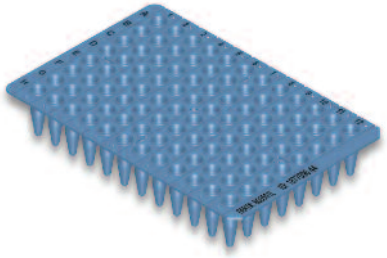
These EU 24 well regular profile plates are sub-skirted and designed for qPCR applications. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Real-Time thermal cyclers (see tables on page 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid (p 34).

Orderno	Description	Package Size
B50240L	EU 24 x 0.2 ml Thin-wall plate Sub-skirted, RP, Light Frosted, Laser Mark Coded, natural	100 plates
B50249L	EU 24 x 0.2 ml Thin-wall plate Sub-skirted, RP, Light Frosted, Laser Mark Coded, white	100 plates

6.2 (q)PCR 96 plates, regular profile, Laser Mark Coded

EU Non-skirted (q)PCR thin-wall 96 x 0.2 ml light frosted plate, breakable at 4°C (Regular Profile)

White



These EU 96 well regular profile plates are non-skirted and designed for qPCR applications. Plates can be easily cut and are breakable at 4°C. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Real-Time thermal cyclers (see tables on page 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid.(p 34) ABI compatible.

Orderno	Description	Package Size
B50501L	EU 96 x 0.2 ml Thin-wall plate, Regular Profile, Light Frosted, Laser Mark Coded, natural	.25 plates
B50509L	EU 96 x 0.2 ml Thin-wall plate, Regular Profile, Light Frosted, Laser Mark Coded, white	.25 plates

Colored plates are available on request.

Plates can be color coded by using wide area grids

EU Semi-skirted (q)PCR thin-wall 96 x 0.2 ml plate, cutable and breakable (4°C) Regular Profile

White

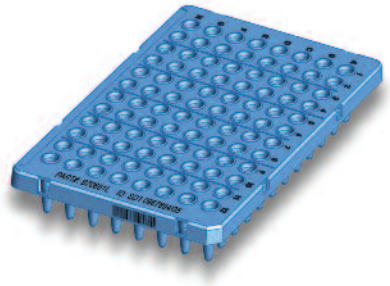
These EU 96 well regular profile plates are semi-skirted and designed for qPCR applications. Plates can be easily cut in sections of 3 rows and are breakable at 4°C. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Real-Time thermal cyclers (see tables on page 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid.

Orderno	Description	Package Size
B50651L	EU 96 x 0.2 ml Thin-wall plate, Regular Profile, Light Frosted, Laser Mark-Coded, natural	.25 plates
B50659L	EU 96 x 0.2 ml Thin-wall plate, Regular Profile, Light Frosted, Laser Mark Coded, white	.25 plates

6.3 (q)PCR 96 plates, regular profile, Laser Mark and Barcoded

EU Semi-skirted (q)PCR thin-wall 96 x 0.2 ml plate (RP), extra robust and rigid.

White

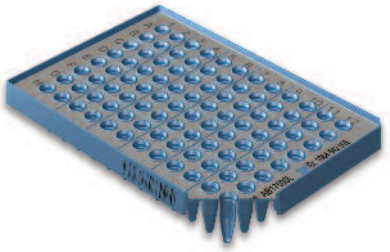


These EU 96 well plates have a very rigid, extra stabilized frame, and a semi-skirt that makes them suitable for robotic handling. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Real-Time thermal cyclers (see tables on page 26 - 29).

Orderno	Description	Package Size
B70651L	EU 96 x 0.2 ml Semi Skirted plate, RP, Extra Robust, Laser Marked Coded, natural	.25 plates
B70659L	EU 96 x 0.2 ml Semi Skirted plate, RP, Extra Robust, Laser Marked Coded, white	.25 plates

EU Frosted sub-skirted thin-wall 96 x 0.2 ml plate, ABI compatible

White



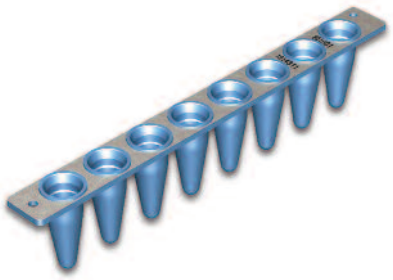
These EU 96 well plates are of superior quality and price alternative, designed to fit any Applied Biosystems regular or Real-Time PCR thermal cycler as well as ABI sequencers. They have a rigid, extra stabilized frame and an elevated skirt. They are suited for both automatic loading as well as robotic handling. To improve Real-Time PCR signal yields, the tubes in this 96-well plate are frosted. For more multi-purpose alternatives see Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65).

Orderno	Description	Package Size
AB17500L	ABI Compatible, EU 96 x 0.2 ml Thin-wall platel, Laser Mark Coded, natural	.25 plates
AB17509L	ABI Compatible, EU 96 x 0.2 ml Thin-wall plate, Laser Mark Coded, white	.25 plates
BB17500L	ABI Compatible, EU 96 x 0.2 ml Thin-wall plate, Laser Mark Coded, Barcoded, natural	.25 plates
BB17509L	ABI Compatible, EU 96 x 0.2 ml Thin-wall plate, Laser Mark Coded, Barcoded, white	.25 plates

6.4 Low profile (q)PCR 8-tube strips, Laser Mark Coded

EU 0.2 ml Light frosted low profile thin-wall 8-tube strip Extra Robust (0.1 ml)

White



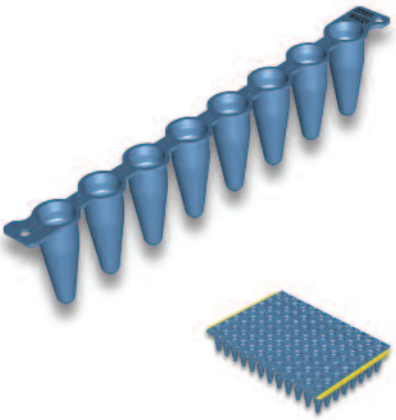
Fits almost all cycler models and qPCR (fast) cycler models which accept low profile products. (ABI*(fast), Roche 480*, Bio-Rad, Eppendorf)(*requires specific adaptor). See Cycler to Product charts (see tables on pages 26 - 29). Closure can be accomplished with any EU 8-cap strip. For qPCR use B57801 or B79701 cap strips.

Orderno	Description	Package Size
B59901L	EU 0.2ml Thin-wall 8-tube strip, ER, LP, Frosted, Laser Mark Coded, natural	.....10 grids hold 120 strips
B59909L	EU 0.2ml Thin-wall 8-tube strip, ER, LP, Frosted, Laser Mark Coded, white	.....10 grids hold 120 strips

Hint: Fits ABI Veriti, StepOne, StepOne plus, 7500 Fast, 7900 Fast, Roche 480* (*with adaptor, Piko, CFX and many other cyclers)

EU 0.2 ml Light frosted low profile thin-wall 8-tube strip (0.1 ml)

White



Part component for low profile thin-wall 8-tube strip with single attached Cap

Fits almost all cycler models and qPCR (fast) cycler models which accept low profile products. (ABI*(fast), Roche 480*, Bio-Rad, Eppendorf)(*requires specific adaptor). See Cycler to Product charts (see tables on pages 26 - 29). This strip can be used in combination with the 8-single attachable indented cap strip. Closure can be accomplished with any EU 8-cap strip. For qPCR use B57801, B79701 cap strips or B79501 EU 8-Single attachable Indented Cap.

Orderno	Description	Package Size
B77009L	EU 0.2ml Thin-wall 8-tube strip, ER, LP, Frosted, Laser Mark Coded, white	.....10 grids hold 120 strips

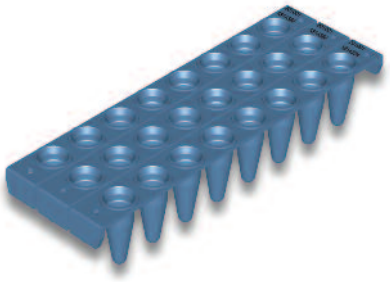
Hint: Fits ABI Veriti Fast, StepOne, StepOne plus, 7500* Fast, 7900 Fast, 9800, Roche 480* (*with adaptor, Piko, CFX and many other cyclers)

For adaptors see page 59.

6.5.0 Low profile (q)PCR 24 and 48 plates, Laser Mark Coded

EU Semi-skirted (q)PCR thin-wall 24 x 0.2 ml light frosted plate (Low Profile, 0.1 ml)

White



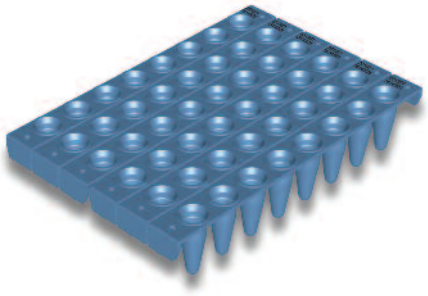
These EU 24 well low profile plates are semi-skirted and designed for qPCR applications. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Fast Real-Time cyclers (see tables on page 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid (p 34).

Orderno	Description	Package Size
B50340L	EU 24 x 0.2 ml Thin-wall plate Sub Skirted ,LP, LF, Laser Mark Coded, natural	100 plates
B50349L	EU 24 x 0.2 ml Thin-wall plate Sub Skirted ,LP, LF, Laser Mark Coded, white	100 plates

Hint: Fits ABI Veriti Fast, StepOne, StepOne Plus, 9800, Finnzymes Piko and others.

EU Semi-skirted (q)PCR thin-wall 48 x 0.2 ml light frosted plate (Low Profile, 0.1 ml)

White



These EU 48 well low profile plates are semi-skirted and designed for qPCR applications. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in many 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29) Plate is robust, flat and can be color coded using a Pre-Post Tube support grid (p.34).

Orderno	Description	Package Size
B71601L	EU 48 x 0.2 ml Thin-wall plate Sub Skirted ,LP, LF, Laser Mark Coded, natural	50 plates
B71609L	EU 48 x 0.2 ml Thin-wall plate Sub Skirted ,LP, LF, Laser Mark Coded, white	50 plates

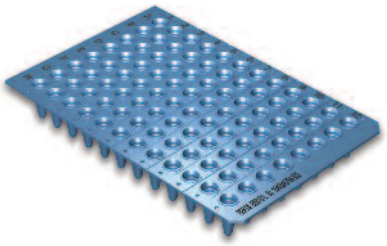
Hint: Fits ABI Veriti Fast, StepOne, StepOne Plus, 9800 and others.

6.5.1 Low profile (q)PCR 96 plates, Laser Mark Coded

EU Non-skirted thin-wall 96 x 0.2 ml plate (Low Profile, 0.1 ml)

White

These EU 96 well low profile plates are non-skirted. Plates can be easily cut into 16, 24, 32 or 48-well pieces. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in many 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid (p.34).

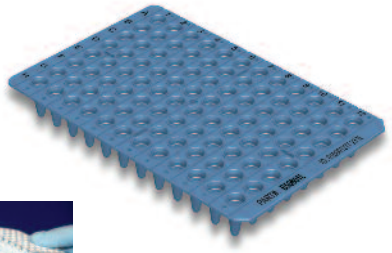


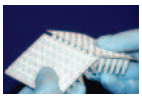
Orderno	Description	Package Size
B60101L	EU 96 x 0.2 ml Thin-wall plate, LP, Laser Mark Coded, natural	25 plates
B60109L	EU 96 x 0.2 ml Thin-wall plate, LP, Laser Mark Coded, white	25 plates

EU Non-skirted (q)PCR thin-wall 96 x 0.2 ml light frosted plate, breakable at 4°C (Low Profile, 0.1 ml)

White

These EU 96 well low profile plates are non-skirted and designed for qPCR applications. Plates can be easily cut and are breakable at 4°C. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in many 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid (p.34).



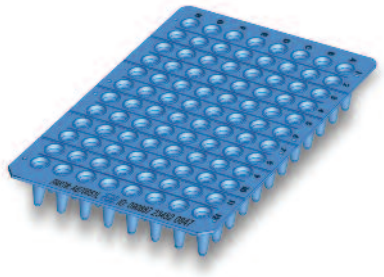


Orderno	Description	Package Size
B50601L	EU 96 x 0.2 ml Thin-wall plate, LP, LF, Laser Mark Coded, natural	25 plates
B50609L	EU 96 x 0.2 ml Thin-wall plate, LP, LF, Laser Mark Coded, white	25 plates

EU Frosted non-skirted thin-wall 96 x 0.2 ml plate (Low Profile, 0.1 ml)

White

The plate has frosted tubes and can be used in Real-Time applications without using other colored plates typically used for signal enhancement in Real-Time PCR procedures. Plates can easily be cut into 16, 24, 32 or 48-well pieces. Can be used in many 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29). Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65).



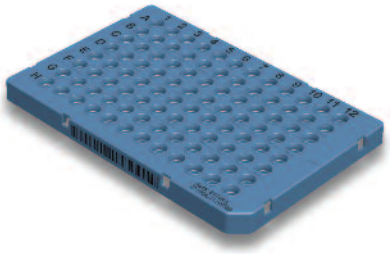
Orderno	Description	Package Size
AB70651L	EU 96 x 0.2 ml Thin-wall plate, LP, frosted, Laser Mark Coded, natural	25 plates
AB70659L	EU 96 x 0.2 ml Thin-wall plate, LP, frosted, Laser Mark Coded, white	25 plates

6.5.2 Low profile (q)PCR 96 plates, Laser Mark and Barcoded

EU Semi-skirted (q)PCR thin-wall 96 x 0.2 ml light frosted plate, Roche 480 compatible (Low Profile).

White

These EU 96 well low profile plates are semi-skirted, designed for qPCR applications and to fit Roche 480 cyclers with 96 well blocks. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). In addition to Roche 480 cyclers, it can be used in many 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29).



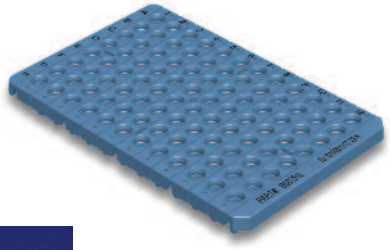
Orderno	Description	Package Size
B17480L	EU Roche 480 96 x 0.2 ml Thin-wall plate, semi-skirted, LP, LF, Laser Mark Coded, natural	.25 plates
B17489L	EU Roche 480 96 x 0.2 ml Thin-wall plate, semi-skirted, LP, LF, Laser Mark Coded, white	.25 plates
BB17489L	EU Roche 480 96 x 0.2 ml Thin-wall plate, semi-skirted, LP, LF, Laser Mark Barcoded, white	.25 plates

For cutable plates and strips which fit Roche 480 cyclers in combination with BIOplastics Roche 480 adaptor (B79480) see low profile light frosted or white non-skirted plates, 8-tube strips LP, 12-tube strips LP, low profile strips with attached caps (B72811) low profile single tubes.
For B79501 combined with B77001 or B77101 use adapor B79481.

EU Semi-skirted (q)PCR thin-wall 96 x 0.2 ml plate, cutable and breakable (4°C) (Low Profile)

White

These EU 96 well low profile plates are semi-skirted and designed for qPCR applications. Plates can be easily cut in sections of 3 rows and are breakable at 4°C. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in most 0.2 ml regular block and Fast Real-Time thermal cyclers (see tables on page 26 - 29). Plate is robust, flat and can be color coded using a Pre-Post Tube support grid.



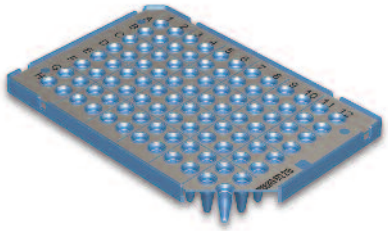
Orderno	Description	Package Size
B50751L	EU 96 x 0.2 ml Thin-wall plate, Low Profile, Light Frosted, Laser Mark Coded, natural	.25 plates
B50759L	EU 96 x 0.2 ml Thin-wall plate, Low Profile, Light Frosted, Laser Mark Coded, white	.25 plates
BB50751L	EU 96 x 0.2 ml Thin-wall plate, Low Profile, Light Frosted, Laser Mark Barcoded, natural	.25 plates
BB50759L	EU 96 x 0.2 ml Thin-wall plate, Low Profile, Light Frosted, Laser Mark Barcoded, white	.25 plates

Hint: Fits ABI fast cyclers, StepOne Plus, Bio-Rad, Eppendorf and other. Excellent for qPCR.

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Regular Profile 96 well semi-skirted and breakable plates see page 46.

6.5.2 Low profile (q)PCR 96 plates, Laser Mark and Barcoded

EU Frosted sub-skirted thin-wall 96 x 0.2 ml plate, ABI compatible (Low Profile, 0.1 ml)

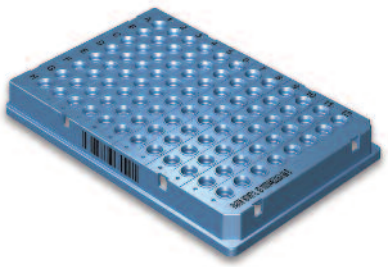


The plate has frosted tubes and can be used in Real-Time applications. The plate is designed to fit ABI 9800 and other "fast"cycler sample blocks (eg. 7500 fast, 7900 fast) and can also be used in many 0.2 ml block regular and Real-Time thermal cyclers (see tables on pages 26 - 29). The working volume for this plate is typically between 5 and 25 µl reaction mixtures.
Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65).

Orderno	Description	Package Size
AB19800L	EU ABI Fast Compatible 96 x 0.2 ml Thin-wall plate, Laser Mark Coded, natural	25 plates
AB19809L	EU ABI Fast Compatible 96 x 0.2 ml Thin-wall plate, Laser Mark Coded, white	25 plates
AB19800LB	EU ABI Fast Compatible 96 x 0.2 ml Thin-wall plate, Laser Mark Barcoded, natural	25 plates
AB19809LB	EU ABI Fast Compatible 96 x 0.2 ml Thin-wall plate, Laser Mark Barcoded, white	25 plates

Hint: Fits All ABI Fast Cyclers.

EU Skirted thin-wall 96 x 0.2 ml plate, flat, robust, stackable and robotic friendly



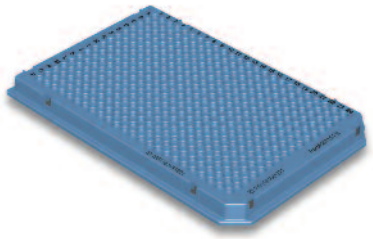
These EU 96 well low profile plates are rigid, flat and skirted. Closure can be accomplished with either EU (optical), strip caps, mats or seals (see (q)PCR strip caps and seals page 62 - 65). Can be used in a number of 0.2 ml regular block and Real-Time thermal cyclers (see tables on pages 26 - 29) Plates are robust, flat, stackable and can be color coded using a Pre-Post Tube support grid (p.34).

Orderno	Description	Package Size
B70671L	EU 96 x 0.2 ml Thin-wall plate, full skirted, Laser Mark Coded, natural	25 plates
B70679L	EU 96 x 0.2 ml Thin-wall plate, full skirted, Laser Mark Coded, white	25 plates
B70671LB	EU 96 x 0.2 ml Thin-wall plate, full skirted, Laser Mark Barcoded, natural	25 plates
B70679LB	EU 96 x 0.2 ml Thin-wall plate, full skirted, Laser Mark Barcoded, white	25 plates

See Cycler to Product charts (page 26 - 31) or the interactive options at www.bioplastics.com.
For Regular Profile 96 well sub-skirted ABI plates see page 47.

6.6 384 (q)PCR plates, Laser Mark and Barcoded

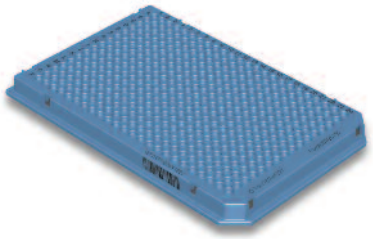
EU Thin-wall 384 well plate, Roche 480 type, Flat, robust, stackable and robotic friendly



This full-skirted 384 well EU plate is designed to fit Roche 480 cyclers. Optimized for robotic high-throughput applications. Can be used in many 384 well block regular and Real-Time thermal cyclers (see tables on pages 26 - 29). Plates are rigid, flat and stackable. Closure can be accomplished with one of the EU Seals (157300, 157200). Plates contains BPLPM technology.

Orderno	Description	Package Size
B71515L	EU 384 Well Thin Wall plate, Roche 480 Type, Laser Mark Coded, natural	40 plates
B71519L	EU 384 Well Thin Wall plate, Roche 480 Type, Laser Mark Coded, white	40 plates
B71519LB	EU 384 Well Thin Wall plate, Roche 480 Type, Laser Mark Coded, Barcode, white	40 plates

EU Skirted thin-wall 384 well plate, ABI compatible type, flat, robust, stackable and robotic friendly



This superior 384 well EU plate is designed to fit ABI cyclers and optimized for robotic applications. Allows high-throughput and low-volume processing. Can be used in many 384 well block regular and Real-Time thermal cyclers (see tables on pages 26 - 29). Plates are rigid, flat and stackable. Closure can be accomplished with one of the EU Seals (157300, 157200). Plates contains BPLPM technology.

Orderno	Description	Package Size
B70515L	EU 384 Well Thin Wall plate, ABI Type, Laser Mark Coded, natural	40 plates
B70519L	EU 384 Well Thin Wall plate, ABI Type, Laser Mark Coded, white	40 plates
B70515LB	EU 384 Well Thin Wall plate, ABI Type, Laser Mark Coded, Barcode, natural	40 plates

6.7 Screw cap (cryo) tubes (Laser Mark Coded)

BIOplastics' screw cap tubes are an excellent means of storage. They are made of polypropylene, with a light frosted easy "write on" outer surface and a plain, homogeneous surface on the inside. screw cap tubes are catagorized into three different volumes: 0.5 ml, 1.5 ml and 2.0 ml. Screw cap tubes are available as conical or free standing tube types. Each individual tube is uniquely Laser Mark Coded. They can be frozen down to - 200°C and centrifuged up to 20.000 g.

Conical (without screw caps)

Orderno	Description	Package Size
B71057L	Natural, 0.5 ml conical screw cap tube, Laser Mark Coded, natural	.5 bags of 50 tubes each
B71058L	Natural, 1.5 ml conical screw cap tube, Laser Mark Coded, natural	.5 bags of 50 tubes each
B91201L	Natural, 2.0 ml conical screw cap tube, Laser Mark Coded, natural	.5 bags of 50 tubes each

B71057L

Free standing (without screw caps)

B71060L	Natural, 0.5 ml free standing screw cap tube, Laser Mark Coded, natural	.5 bags of 50 tubes each
B71061L	Natural, 1.5 ml free standing screw cap tube, Laser Mark Coded, natural	.5 bags of 50 tubes each
B71072L	Natural, 2.0 ml free standing screw cap tube, Laser Mark Coded, natural	.5 bags of 50 tubes each

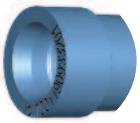
B71060L

All screw cap tubes can be closed with any BIOplastics screw caps either the Secure Closure caps or the Easy Closure PE cap with secure closure technology which allows one hand opening and closure. See page 99 for screw caps.

6.8 Titer dilution and storage (cryo) tubes (Laser Mark Coded)

Single tubes

Orderno	Description	Package Size
B74056L	Natural, 0.5 ml Dilution and Storage tubes	.5 bags of 50 tubes each

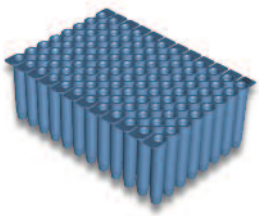


8-Strip tubes

Orderno	Description	Package Size
B74156L	Natural, 0.5 ml Dilution and Storage 8-strip tubes	.120 strips

96 Inter connected tube-plate

Orderno	Description	Package Size
B74256L	Natural, 0.5 ml Dilution and Storage 96 inter connected tube-plate	.12 plates
B74257L	Natural, 0.5 ml Dilution and Storage 96 inter connected tube-plate, racked in box	.8 boxes



All tubes can be closed using the extra robust EU robust indented flat 8 cap-strip (B75701), indented flat 12 cap-strip (B56501), and EU indented flat cap plate 96 format (B57501).

1 What is the difference between EU-O-type, A-type and M-type material?
EU-O-type, A-type and M-type material are all blends of polypropylene. The types of polypropylenes and the ratios between them differ. EU-O type is the most optimal blend with the lowest binding capacity for bio molecules and ions, the highest flexibility and the best optical characteristics.
BIOplastics recommend this type for molecular biology applications. It is the default type used in most BIOplastics products. A-type resembles the classical polypropylene mix used by many conventional manufacturers. M-type resembles EU-O-type in binding capacity, but is less flexible.

2 Do Extreme Uniform plastics contain softeners?
BIOplastics products are manufactured using a proprietary blend of polypropylenes.
It is this blend, which gives the plastics its optically clear and flexible characteristics.

3 Are release agents used in the manufacturing process of Extreme Uniform plastics?
No releasers are used in the manufacturing process. The reactions performed in Extreme Uniform tubes, 8-strips, 96-well or 384 plates can therefore not be disturbed by releasers.

4 Which types of polypropylenes are used in Extreme Uniform plastics?
A proprietary confidential blend of polypropylenes is used to manufacture Extreme Uniform plastics.

5 Which EU tubes, 8-strips, 96-well and 384 plates fit my thermocycler?
Please refer to the PCR thermocycler and Real-Time PCR thermocycler compatibility tables (pages 26-29) or use the interactive and multi comparison option on the website www.bioplastics.com.

6 Which EU 96-well plates fit my sequencer?
Please refer to the sequencer compatibility table in the current BIOplastics catalog (See page 26-29).

7 Which tip fits my pipette?
Please refer to compatibility table (page 68) or interactive options on the website www.bioplastics.com.

8 Can a fluorescent background be observed when using EU plastics for fluorescent application?
All EU (q)PCR plastics have no fluorescent background.

9 Why are frosted 96-well plates used in fluorescent applications?
Frosted 96-well plates scatter background light, therefore less background light is detected and therefore a lower background and a higher signal-to-noise ratio is detected.
Furthermore, the signal is boosted, which leads to an additional increase in signal-to-noise ratio.

10 Which EU 96-well plates can be cut into smaller pieces?
Any EU non-skirted plates and some semi skirted plates can be cut in to smaller plates or strips.

11 Which EU seals fit which EU 96-well and 384 plates?
Both EU Opti-seal (157300) and EU Alu-seal (157200) can be applied to any EU 96-well and 384 plate

12 Which 8-cap strips be used to close EU 96-well plates?
All EU 8-cap strips and 12 strips can be combined with all EU 96-well plates.

13 Which EU 8-cap strip fits which EU 8-tube strip?
All EU 8-cap strips fit all EU 8-tube strips.

14 Which EU 96-well plates have notches for robotic handling?
The EU semi-skirted 96-well plates and the sub-skirted plates have notches for robotic handling.

15 Do the EU 96-well and 384 plates meet the SBS standards?
All EU 96-well plates meet the SBS standards for well layout, well-to-well distance and well marking.
Footprint and height standards are met for only certain types of plates.
Please contact us via info@bioplastic.com for further details concerning these standards.

16 Are the EU Alu-seals piercable?
Although the EU Alu-seals (157200) are thicker than most other seals, they are pierceable.

17 What does the "Guaranteed free of DNase, RNase, metal, pyrogens" label mean on EU (q)PCR plastics?
All products with the label "Guaranteed free of DNase, RNase, metal, pyrogens" are manufactured under GMP, no-hands-on conditions to ensure a DNase, RNase, metal, and pyrogens free product that can be used for molecular biology applications, without the need to sterilize or autoclave.

18 Are all EU products sterilized?
Molecular biology applications require a DNase, RNase, metal and pyrogens free product, not a sterile product. All EU plastics are by default guaranteed free of DNase, RNase, metal, pyrogens.
A sterile version of the EU product is also available when the application requires sterilization, for example cell culture or microbiology applications.

19 Do EU (q)PCR plastics have to be autoclaved before use in (q)PCR?
All (q)PCR products are guaranteed free of DNase, RNase, metal, pyrogens and can be used without autoclaving.

20 How are EU products sterilized?
EU products are sterilized by 60Co irradiation

21 Can EU products be autoclaved?
EU products can be autoclaved for 15 minutes at 121°C at 2 bar. However, we recommend sterilizing the EU plastics by 60Co irradiation. Both means of sterilization can make the polypropylene more brittle.

22 What is the shelf life of EU plastics?
In general plastic disposables do not have a shelf life. It is recommended to store the EU plastics out of direct sunlight, at room temperature in the original packaging.

23 Can samples be frozen in EU plastics?
Samples can be frozen in EU plastics upto to -200°C. See section Tubes.
If freezing allow 10% "air space" and fill up to 90% of the total volume of the tube to allow expansion of sample when freezing. (water based solutions)

24 Where can the lot number of an EU product be found?
All boxes and bags of EU products are labeled with a white label with barcode and batch#.
In case of any complaints or questions, please mention barcode and batch# for reference.

25 Are EU plastics traceable?
The production of EU plastics, starting from incoming raw material up to the final packaging is traceable. The barcode and batch# trace how and when the plastic was manufactured.
This included raw material batches, injection moulding machine#, mould number#, moulding conditions, production date, QC dates, packaging date, packaging person etc.).

LEGENDA

Extra Low Adhesion
This product is specially treated to reduce the binding of proteins

Low Profile
The height of this product is shorter than regular, and has improved evaporation characteristics

Regular Profile
This product has a regular height

High Profile
This product has a high profile

Certified
This product is certified to be free of DNa(se), RNa(se), Pyrogens, metals and ATP

DNA, DNase, RNA, RNase and Pyrogen free
This product is free of DNa(se), RNa(se), Pyrogens and metals

Pore Size 18 µm
Filtertip with an average pore size of 18 µm

Fully skirted
This plate is fully skirted, and can be used in robotic applications

Semi skirted
This plate is semi skirted, and can be used in robotic applications

Sub skirted
This plate has an elevated skirt

Non skirted
This plate has no skirt

Graduated
This product is graduated for quick volume identification

Thin wall
This product has a thin wall

Thick wall
This product has a thick wall

Cutable
This product can be cut in the desired size

Frosted
This product has a frosted outer texture which enhances the qPCR signal

Light Frosted
This product has a light frosted outer texture which enhances the qPCR signal

Optical
This product has the following optical clear area of ... mm^2 (5.9, 6.6, 7.0, 7.1, 12.6 mm^2)

A-Type Material
This product is made of a traditional PP, used for general laboratory applications

M-Type Material
This product is made of a different blend of PP, designed for robust general lab applications

O-Type Material
This product is made of a different blend of PP, designed for PCR and qPCR applications

Beveled Orifice
The orifice of this product is beveled at 45° to improve sample rejection accuracy

Evaporation Grade 1
Loss of PCR volume is less than 3%. It's possible to PCR in as less as 5 µl

Evaporation Grade 2
Loss of PCR volume is between 3 and 15%. It's possible to PCR < 15 µl

qPCR Grade 1
This product has enhanced signal-to-noise ratio

qPCR Grade 2
This product has superior signal-to-noise ratio

Autoclavable
This product is autoclavable

Sterile
This product has been sterilized

Laser Mark ID and Coded
This product is uniquely laser marked and coded