

High quality tips for high performance pipettes

The tip can contribute 50% to the performance of your pipetting System.



Diamond Tips are a significant part of the pipetting system and the following factors influence the performance of your pipette: geometry, molding and quality-control during the manufacturing process.

Geometry

Diamond Tips are designed to assure optimal Pipetman performance. Each Pipetman is calibrated using Diamond Tips. Various factors (which depend on tip geometry) such as dead volume, or height of the liquid in the tip, influence the precision and accuracy of your pipetting system. Diamond Tips are designed to minimize the effects of these factors in order to assure meeting Pipetman specifications, whatever the volume selected (within the useful volume range.)

Pure polypropylene

No dyes, just translucent polypropylene. You really can see your sample. Gilson Diamond Tips use a polypropylene that has high hydrophobic properties to avoid any liquid retention during dispensing.

Not standard, not beveled, just fine

Gilson Diamond Tips have a very fine point and improved flexibility. Taking advantage of a very small wall thickness and internal diameter, Diamond Tips reduce the capillary effect (droplet retention) on the external wall of the tip. The last droplet is easier to dispense.





Precision molding

Unfinished molding results in flashes and a rough surface, which lead to water retention in the tip and incomplete dispensing. Gilson has strict requirements on the quality of the molds and implements very strict quality controls in order to avoid

faults. A certificate of quality, delivered with each package, is your best guarantee!

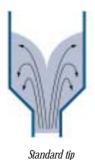






Optimized large volume tips

Gilson Diamond Large-volume Tips prevent splashing on aspiration, especially important when handling corrosive or hazardous samples.





Diamond tip

Perfectly airtight

Improper fitting of the tip is a major cause of bad performance. Diamond Tips have built-in sealing rings that are specially designed to fit precisely on your Pipetman, in order to form a perfectly airtight seal. Because Gilson manufactures both Pipetman and Diamond Tips, the diameters of the tip-collar and tip-holder are calculated to fit perfectly. There is no need to use excessive force to obtain a perfect fit and maximum performance. For safe pipetting all the way down the bottom of microtubes, without sacrificing accuracy and precision, Gilson has lengthened the volumetric part of the tip.

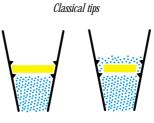


Prevention of contamination

From conception to packaging, Gilson Diamond Tips offer you maximum security to prevent contamination of your tip and Pipette.



Equipped with a high-density filter, Diamond Tips play a critical role in applications such as PCR, sequencing, handling of infectious and radioactive samples, and other biological procedures where trace carryover can invalidate experimental results. A high efficiency filter stops particles down to $1\mu m$. Contaminants can be transferred to the tip holder by aerosol droplets, the pore size of the Diamond Filter has been scientifically determined to constitute an effective barrier against aerosols generated by pipetting. Diamond Filter Tips are available in autoclavable or sterilized Tipack formats.



After autoclave

Before autoclave

Before and after autoclave

Diamond tips





Sterilized tips

Gilson Sterilized Diamond Tips are irradiated by Gamma rays for a more efficient sterilization. Practical, no need to autoclave, sterilized tips are ready to use. Sterilized Diamond Tips are delivered with a Certificate of Sterilization, specifying the date of irradiation. Gilson Diamond Tips are wrapped in medical device quality plastic which provides a complete shield against contaminants. Sterilized packaging is available for both classic and filter tips. Gilson Diamond Tips are available in two types of packaging:

- · individual wrapped for complete protection up to the moment of use (steril pack).
- Tipack racks (96 tips) for other uses.

Absence of metal

The absence of metal is vital for laboratories involved in detecting trace elements in biological fluids or food products. That is why Diamond Tips are molded from the purest polypropylene. As a service to laboratories that perform trace metal analysis, Gilson supplies typical values of trace metal release for each Diamond Tips.

Totally autoclavable filter tips

Diamond Filter Tips are perfectly inert in the autoclave. Other filters may shrink or crumble, but Diamond Filter Tips can be autoclaved with no loss of efficiency. Even several autoclavings (121°C, 0.1 mPa, 20 min), a permanent sealing ring is still clearly visible.

Nucleases, RNA, DNA and proteases free!

Manufactured by a fully automatic process and in a controlled environment, Diamond Tips are never touched by human hands. Sterilized Diamond Filter Tips are certified free of detectable Rnases and Dnases, DNA, RNA and proteases.

Diamond Tips, a major step of your quality requirements

Pipetting systems, as for all of your laboratory instruments, are to be part of your Quality Management system.

Tips are part of your pipetting system, they have to be integrated in the Quality Management. Diamond Tips are designed to provide you with exclusive Quality Management features.

Fully traceable all the way from the mold to your laboratory bench

A batch number on every package. From individually wrapped Sterilized Diamond Tip, to Tipack racks, to bags and boxes and even to shipping boxes. To help you organize your paperwork, the batch number also appears on certificates of quality and on certificates of sterilization.





Color coded for easy identification

Help prevent errors in the stock room and in the laboratory. Diamond Tipack, packaging and labels are color-coded for volume recognition at a glance (but to protect samples, Diamond Tips contains no dye or colorant).





A quality certificate in every box

The Gilson certificate of quality states that the manufacturing batch from which tips were drawn has been sampled and inspected. The batch number appears on both the certificate and the package, permitting traceability and attesting conformity to Gilson's strict quality standards.

Guarantee manufacturing quality

Gilson Diamond Tips are frequently copied. That's why they are individually marked with the Gilson logo. The logo helps you differentiate genuine Gilson tips from copies purported to be Pipetman compatible. In addition, Diamond Tips carry an identification number. This number is part of Gilson's quality insurance system that guarantees the manufacturing quality of tips.



A large choice of packaging to fit your activity

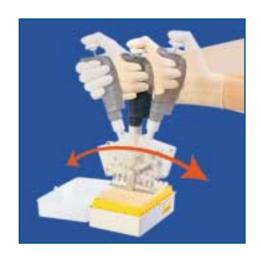
Your needs, applications, budget and tip consumption vary a lot according to your activity.



Gilson offers one of the largest ranges of packaging. Choose Diamond Tips to provide each Pipetman user with the proper solution.

Rocky rack™: a Gilson exclusive

These patented racks make it easy to fit tips on multichannel pipettes. Tips won't fall off, won't have to be positioned manually. Just a simple rocking motion and you have a perfect seal on all eight or twelve channels.





Tipack™: ready to use

When presented in convenient steady Tipack racks, Diamond Tips are easy to pick-up directly from the rack. To help prevent contamination, the 96 tips are loaded without manual intervention and the box is sealed with a security sticker. Tipack are fully autoclavable and also available sterilized. Tipack are robust and designed to resist withstand being autoclaved several times.



Bags the economical solution

Available in convenient small bags or in economical bulk quantities, bagged tips make it possible for every laboratory to use Pipetman pipettes with the finest quality tips.

Towerpack™: innovative refill system

Discover a new quick and easy automated rack refill! Use 60% less space on your laboratory bench and 70% less plastic. With this amazingly easy-to-use one-hand system, you only need one box for the whole range of Diamond Tips. All Diamond Tip sizes are available in the Towerpack format.



Gilson Diamond Tips: a complete range of solutions for your laboratory...

Diamond classic certified tips assure optimal performance of your Pipetman

	Color Coding	/^	"Ipackin	lipacking autoclaus!	lower Parilized	Steril-Packin	CO.Pack/2	Prelman®	Polime	Pipetman® Ultra	Volume	
DIAMOND TIPS	D10	•	•	•	•	•	•	P2/P10	0.2 - 10 μl	U2/U10	0.2 - 10 µl	
	DL10	•	•	•	•	•	•	· ·	,	· ·	,	
	D200	•						P20	2 - 20 µl	U20	2 - 20 µl	
			•	•	•	•	•	P100	20 - 100 μl	U100	20 - 100 μl	
								P200	50-200 μl	U200	20 - 200 μl	
								8X200 F2 to F200	2 - 200 µl	-	-	
	D1000	•	•	•	•	•	•	P1000/F250 to F1000	200 - 1000 µl	U1000	200 - 1000 µl	
	D5000						•	P5000	1 - 5 ml	U5000	1 - 5 ml	
	D10ml						•	P10ml	1 - 10 ml	U10 ml	1 - 10 ml	
DIAMOND FILTER TIPS	D10	•	•					D2/D10	0.2 10 1	112/1110	0.2 10	
	DFL10	•	•					P2/P10	0.2 - 10 µl	U2/U10	0.2 - 10 µl	
	DF30	•	•					P20/P100 F2 to F25	2 - 30 µl	U20/U100/U200	2 - 30 μl	
	DF100	•	•					P100/P200	20 - 100 µl	U100/U200	20 - 100 μl	
	DF200	•	•					P200 8X200 F50 to F200	20 - 200 μl	U200	20 - 200 μl	
	DF1000	•	•					P1000/F250 to F1000	200 - 1000 μl	U1000	200 - 1000 μl	

The only way to ensure precision and reproducibility across the full volume range of your Pipetman is to use Diamond precision tips.





Dual Volume

Tip Collar

DL10: protection and precision with microtubes

The same accuracy and precision as regular Gilson tips

With most extra-long tips, the volumetric part has been extended, creating more space (dead volume) between the sample and the piston. This higher dead volume has an adverse effect on performance. For safe pipetting all the way down to the bottom of microtubes, without sacrificing accuracy and precision, Gilson has lengthened the collar, not the volumetric part of the tip.

Plus added protection against contamination

Diamond DL 10

with dual position

Tip Collar

When you use a DL10 tip, your pipette shaft is protected from contamination in two ways: firstly by the extended tip collar and secondly by a protective shield on the tip ejector. The shield is autoclavable, transparent and does not contain contaminants.

World Headquarters

Gilson, Inc.

3000 W. Beltline Hwy., P.O. Box 620027, Middleton, WI 53562-0027, USA Telephone: (1) 800-445-7661 or (1) 608-836-1551 • Fax: (1) 608-831-4451

Gilson SAS

19, Avenue des Entrepreneurs - 95400 VILLIERS LE BEL, France Telephone: (33) 1-34-29-50-00 • Fax: (33) 1-34-29-50-20

World Wide Web: www.gilson.com

 $\pmb{E-mail:} sales@gilson.com, service@gilson.com, training@gilson.com, training-sas@gilson.com$

LT800411E, Printed in France, November 2001, Specifications subject to change without notice

ISO 9001 Certified

