making a difference

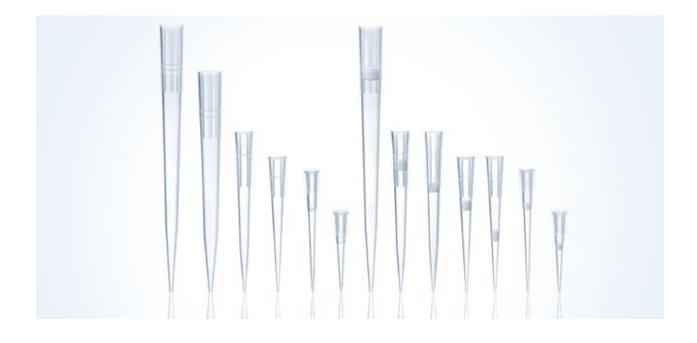
YOUR RESULTS - OUR TIPS





THE SAPPHIRE PORTFOLIO

OPTIMISED LIQUID HANDLING SOLUTIONS FOR ALL YOUR DAILY REQUIREMENTS



We understand that flexibility is critical in terms of modern liquid handling solutions. This is why the Sapphire tips are manufactured in eight different sizes in a **volume range from 10 µl to 1250 µl**, including an extended length 10 µl tip for the recovery of small sample volumes.

All our tips are made of medical grade polypropylene and are available as standard, low-retention, filter or low-retention filter tips.

Depending on the format, Sapphire pipette tips are **packed in racks**, **bulk or refill units**.

Sapphire tips and pipettes when used together provide a fully optimised and harmonised liquid handling solution.

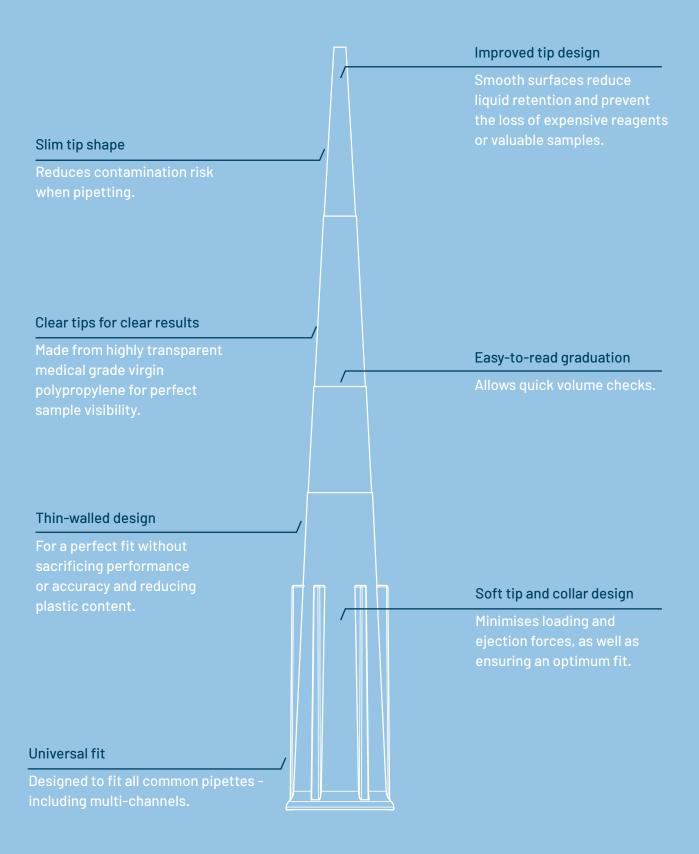




Bulk packed



SAPPHIRE TIPS FEATURES



WHY SAPPHIRE TIPS?

Greiner Bio-One has liquid handling expertise since many decades and has constantly focused on **progress and customer orientation** within this field. As a consequence, we have created a **new generation** of Sapphire pipette tips in a **comprehensive and clear portfolio**.

State-of-the-art production

Our tips are manufactured in our cutting-edge production site in Kremsmünster, Austria. From production to packaging, all steps are **fully automated and integrated in a controlled environment**, which reduces the contamination risk to a minimum.

Low-retention -Because every drop counts

The Sapphire low-retention surface provides minimised adherence of sample material to the inner tip surface. This is obtained by a special treatment, resulting in highest accuracy even with detergents or other viscous and complex samples.

Filter tips -Keep it safe!

Sapphire filter tips reliably limit the carry-over of biological material and aerosols without affecting the accuracy of the pipetted volume. The hydrophobic polyethylene filters are manufactured without additives for a self-sealing effect, allowing the entire sample to be recovered if it accidentally comes into contact with the filter.



All Sapphire Tips are produced in only one quality - the best!

YOUR RESEARCH DESERVES THE BEST QUALITY

All Sapphire tips meet the same high, uniform quality standards regardless of type, surface or shape.

We certify that our products are manufactured and tested in accordance with international standards and meet the required specifications.



- Free of detectable DNase, RNase, human DNA and PCR inhibitors
- / Non-pyrogenic and non-cytotoxic
- / Tested for leachables
- / Sterility level of SAL 10-
- / Manufactured in the EU and tested in accordance with international standards
- Fully automated packaging to avoid particle contamination
- / Full traceability



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THREE FORMATS TO COVER ALL YOUR NEEDS

Sapphire is a sophisticated pipette tip system with three different packaging options. All variants are thought through down to the smallest detail and designed to meet your everday needs and ease your daily routine. In addition, we offer complete traceability for all Sapphire products due to sophisticated product and packaging labels. Moreover, we have put emphasis on sustainability at every stage of the planning process.



RACK with colour-coded rack insert

PATENT-PENDING RACK

- / Two rack sizes cover the whole tip portfolio
- / Available sterile / non-sterile
- / Can be **autoclaved** and **reused** more than 50 times
- / Highly transparent and stable for optimal tip integrity and visibility
- / Stackable and automation-friendly (ANSI external dimensions)
- / Color-coded rack inserts for quick volume identification
- / Designed for both single and multi-channel pipettes
- / Individual packaging for reduced contamination



REFILL UNIT with lateral box opening

RESOURCE-FRIENDLY REFILL UNIT

- / Saves precious time and storage space
- / Environment-friendly due to reduction of packaging and rack material
- / Available sterile / non-sterile
- / Refill inserts can be easily changed one-handed
- / Lateral box opening for convenient removal of the refill inserts
- / Reinforced refill box base for increased stability
- / Colour-coded rack inserts for quick volume identification



RESEALABLE BULK PACKAGING

- / **Economic** refilling of our matching Sapphire racks
- / Easy to open
- / Easy to reseal
- / Available non-sterile
- / Tips are fully autoclavable
- / Robust bag material
- / Colour-coded bag labelling for quick volume identification
- / Low risk of entanglement of tips

BULK PACKAGING

with colour-coded bag labelling

SAPPHIRE PIPETTES PIPETTES AND TIPS IN PERFECT HARMONY

Sapphire pipettes are a variable volume range of airdisplacement pipettes designed and built to deliver optimal performance, ergonomics, and robustness in day-to-day use. The lightweight design coupled with a state-of-the-art mechanism reduces pipetting forces and makes our pipettes both comfortable and easyto-use. The contoured body shape allows for a relaxed grip whatever size your hand, and the **3-position tip ejector button** makes pipetting comfortable

for both left-handed and right-handed users.

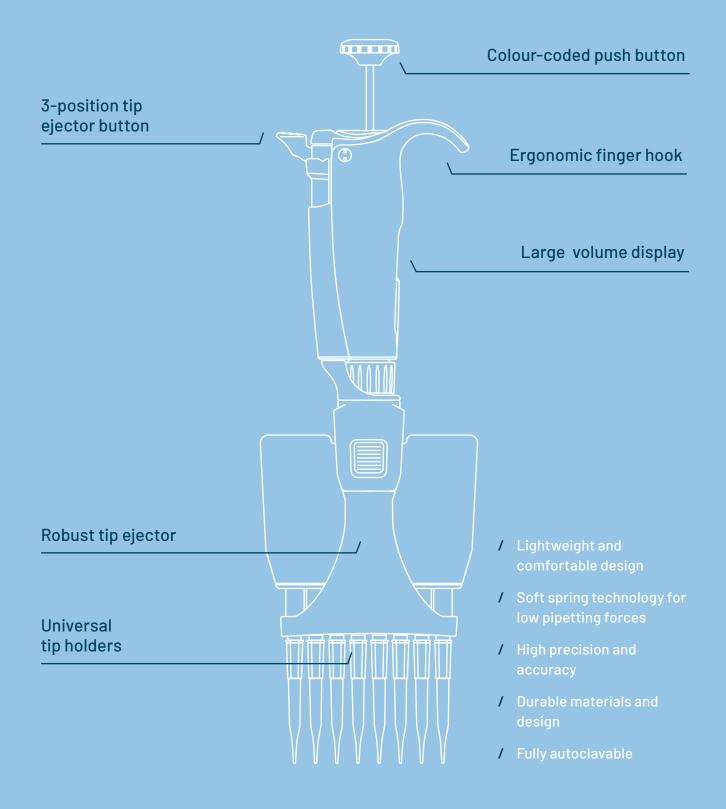
Sapphire pipettes provide an excellent performance within **ISO 8655** which is considered the basis for determining the accuracy and precision of air-displacement pipettes. In combination with Sapphire pipette tips they show one of the lowest error tolerances on the market.



KEY FACTS

- / Optimal performance
- / Outstanding accuracy & precision
- / Ergonomic design & minimal pipetting forces for a new level of comfort
- Available as single-channel, 8-channel and 12-channel pipettes
- / 3 year warranty

SAPPHIRE PIPETTES FEATURES



PRODUCT OVERVIEW - SAPPHIRE PIPETTE TIPS

10 µl tips

Volume range: 0.2-10 μl; corresponding rack: 770310 (● red insert)

| Tip version | Packaging option | Shelf box [pcs.] | Shipping carton [pcs.] | Order no. |
|----------------------------|------------------|------------------|------------------------|-----------|
| Pipette tip | Rack | 960* | 5,760 | 771351 |
| | Rack, sterile | 960* | 5,760 | 771352 |
| | Refill | 960 | 4,800* | 771354 |
| | Refill, sterile | 960 | 4,800* | 771355 |
| | Bulk | 1,000 | 10,000* | 771350 |
| Filter tip | Rack, sterile | 960* | 5,760 | 771353 |
| Pipette tip, low-retention | Rack | 960* | 5,760 | 771361 |
| | Rack, sterile | 960* | 5,760 | 771362 |
| | Refill | 960 | 4,800* | 771364 |
| | Refill, sterile | 960 | 4,800* | 771365 |
| Filter tip, low-retention | Rack, sterile | 960* | 5,760 | 771363 |

10 µl extended tips

Volume range: 0.5-10 µl; corresponding rack: 770310 (• red insert)

| Tip version | Packaging option | Shelf box [pcs.] | Shipping carton [pcs.] | Order no. |
|----------------------------|------------------|------------------|------------------------|-----------|
| Pipette tip | Rack | 960* | 5,760 | 772351 |
| | Rack, sterile | 960* | 5,760 | 772352 |
| | Refill | 960 | 4,800* | 772354 |
| | Refill, sterile | 960 | 4,800* | 772355 |
| | Bulk | 1,000 | 5,000* | 772350 |
| Filtertip | Rack, sterile | 960* | 5,760 | 772353 |
| Pipette tip, low-retention | Rack | 960* | 5,760 | 772361 |
| | Rack, sterile | 960* | 5,760 | 772362 |
| | Refill | 960 | 4,800* | 772364 |
| | Refill, sterile | 960 | 4,800* | 772365 |
| Filter tip, low-retention | Rack, sterile | 960* | 5,760 | 772363 |

20 µl tips

Volume range: 2-20 μl; • orange insert

| , sterile | 960* | 5,760 | 773353 |
|-----------|------|-------|--------|
| , sterile | 960* | 5,760 | 773363 |
| | | | |
| | | | |

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100 µl tips

Volume range: 2-100 μl; • dark yellow insert

| Tip version | Packaging option | Shelf box[pcs.] | Shipping carton [pcs.] | Order no. |
|---------------------------|------------------|-----------------|------------------------|-----------|
| Filter tip | Rack, sterile | 960* | 5,760 | 774353 |
| Filter tip, low-retention | Rack, sterile | 960* | 5,760 | 774363 |
| | | | | |
| | | | | |

200 µl tips

Volume range: 5-200 μl; corresponding rack: 770320 (• yellow insert)

| Tip version | Packaging option | Shelf box [pcs.] | Shipping carton [pcs.] | Order no. |
|----------------------------|------------------|------------------|------------------------|-----------|
| Pipette tip | Rack | 960* | 5,760 | 775351 |
| | Rack, sterile | 960* | 5,760 | 775352 |
| | Refill | 960 | 4,800* | 775354 |
| | Refill, sterile | 960 | 4,800* | 775355 |
| | Bulk | 1,000 | 15,000* | 775350 |
| Filter tip | Rack, sterile | 960* | 5,760 | 775353 |
| Pipette tip, low-retention | Rack | 960* | 5,760 | 775361 |
| | Rack, sterile | 960* | 5,760 | 775362 |
| | Refill | 960 | 4,800* | 775364 |
| | Refill, sterile | 960 | 4,800* | 775365 |
| Filter tip, low-retention | Rack, sterile | 960* | 5,760 | 775363 |

300 µl tips

Volume range: 10-300 µl; corresponding rack: 770330 (● green insert)

| Tip version | Packaging option | Shelf box [pcs.] | Shipping carton [pcs.] | Order no. |
|----------------------------|------------------|------------------|------------------------|-----------|
| Pipette tip | Rack | 960* | 5,760 | 776351 |
| | Rack, sterile | 960* | 5,760 | 776352 |
| | Refill | 960 | 4,800* | 776354 |
| | Refill, sterile | 960 | 4,800* | 776355 |
| | Bulk | 1,000 | 10,000* | 776350 |
| Filter tip | Rack, sterile | 960* | 5,760 | 776353 |
| Pipette tip, low-retention | Rack | 960* | 5,760 | 776361 |
| | Rack, sterile | 960* | 5,760 | 776362 |
| | Refill | 960 | 4,800* | 776364 |
| | Refill, sterile | 960 | 4,800* | 776365 |
| Filter tip, low-retention | Rack, sterile | 960* | 5,760 | 776363 |

*smallest sales unit

PRODUCT OVERVIEW - SAPPHIRE PIPETTE TIPS

1000 µl tips

Volume range: 50-1000 µl; corresponding rack: 770340 (● blue insert)

| Tip version | Packaging option | Shelf box [pcs.] | Shipping carton [pcs.] | Order no. |
|----------------------------|------------------|------------------|------------------------|-----------|
| Pipette tip | Rack | 960* | 3,840 | 777351 |
| | Rack, sterile | 960* | 3,840 | 777352 |
| | Refill | 960 | 4,800* | 777354 |
| | Refill, sterile | 960 | 4,800* | 777355 |
| | Bulk | 1,000 | 5,000* | 777350 |
| Pipette tip, low-retention | Rack | 960* | 3,840 | 777361 |
| | Rack, sterile | 960* | 3,840 | 777362 |
| | Refill | 960 | 4,800* | 777364 |
| | Refill, sterile | 960 | 4,800* | 777365 |

1250 µl tips

Volume range: 50-1250 µl; corresponding rack: 770340 (• blue insert)

| Tip version | Packaging option | Shelf box [pcs.] | Shipping carton [pcs.] | Order no. |
|----------------------------|------------------|------------------|------------------------|-----------|
| Pipette tip | Rack | 960* | 3,840 | 778351 |
| | Rack, sterile | 960* | 3,840 | 778352 |
| | Refill | 960 | 4,800* | 778354 |
| | Refill, sterile | 960 | 4,800* | 778355 |
| | Bulk | 1,000 | 5,000* | 778350 |
| Filter tip | Rack, sterile | 960* | 3,840 | 778353 |
| Pipette tip, low-retention | Rack | 960* | 3,840 | 778361 |
| | Rack, sterile | 960* | 3,840 | 778362 |
| | Refill | 960 | 4,800* | 778364 |
| | Refill, sterile | 960 | 4,800* | 778365 |
| Filter tip, low-retention | Rack, sterile | 960* | 3,840 | 778363 |

Empty tip racks

| Sapphire tip size [µl] | Rack insert colour | Shelf box[pcs.] | Shipping carton [pcs.] | Order no. |
|------------------------|--------------------|-----------------|------------------------|-----------|
| 10 | • red | 10* | 60 | 770310 |
| 200 | yellow | 10* | 60 | 770320 |
| 300 | • green | 10* | 60 | 770330 |
| 1000 - 1250 | • blue | 10* | 40 | 770340 |

PRODUCT OVERVIEW - SAPPHIRE PIPETTES

Single-channel pipettes

| Volume range [µl] | Colour code | Order no. |
|-------------------|----------------------------------|-----------|
| 0.2-2 | • orange | 8900002 |
| 1-10 | • red | 89000010 |
| 2-20 | light yellow | 89000020 |
| 10 - 100 | light orange | 89000100 |
| 20-200 | • yellow | 89000200 |
| 100 - 1000 | • blue | 89001000 |
| 500-5000 | • violet | 89000500 |
| 1000-10000 | light blue | 89010000 |

8-channel pipettes

| Volume range [µl] | Colour code | Order no. |
|-------------------|----------------------------------|-----------|
| 0.5-10 | • red | 89000810 |
| 2-20 | light yellow | 89000820 |
| 20-200 | • yellow | 89008200 |
| 20-300 | • green | 89008300 |

12-channel pipettes

| Volume range [µl] | Colour code | Order no. |
|-------------------|--------------|-----------|
| 0.5-10 | • red | 89001210 |
| 2-20 | light yellow | 89001220 |
| 20-200 | • yellow | 89012200 |
| 20-300 | • green | 89012300 |

Sustainability-oriented product design reducing the consumption of raw materials



Convenient bulk and refill options that significantly save packaging and storage space



Sapphire racks are **autoclavable** at least **50 times** without any negative impact on product integrity



Sapphire rack inserts are made of recycled raw material



Sapphire cardboard packaging made of recycled material



Optimised injection moulding plant **reduces our carbon footprint by 61 tons of CO**² annually' >> Did you know that the lightweight but robust design of our tips can save up to 253 kg of polypropylene per year in an average research institute with 10 research groups? <<

RESPONSIBLE LIQUID HANDLING

For more than 150 years, we have been an organisation with bold ambitions: to inspire others, create added value for our customers and have a positive impact on our environment and our society. Our sustainability strategy, **Blue Plan**, maps out how we can make this vision a reality.

Blue Plan encompasses all parts of our company around the world. It focuses on three major priority areas, which we have identified as key issues that will shape Greiner's future: climate change, creating a circular business, and people. With our Sapphire product range, we have created a **more sustainable brand** which uses less raw materials and incorporates environmentally friendly packaging.

With these features and our wider sustainability goals, we aim to help your organisation meet its own environmental objectives.

UNCOMPROMISING QUALITY BUT WITH LESS PLASTIC

- Less weight to make your daily pipetting routine easier and more comfortable
- / Significantly less raw material (PP) than many competitors
- Supports sustainability initiatives

DISCOVER MORE ABOUT BLUE PLAN

https://www.greiner.com/en/ greiner-ag/sustainability/



making a difference

www.gbo.com

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