



# The 360° Evolution

Eppendorf Combitips® advanced

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## Time for a New Original!

The invention of the Multipette®/Combitips system marked a milestone in the field of Liquid Handling. Executing long pipetting and dispensing series became remarkably simpler and faster while more reproducible results could be achieved when dealing with viscous, volatile or other challenging liquid types. With innovative sensor technology for automatic tip recognition, the Multipette/Combitips system has become an indispensable tool for every laboratory.

Eppendorf experts have thoroughly optimized the Combitips plus dispenser tips to meet new demands of modern laboratories. The result: Combitips advanced - a 360° evolution with a variety of advantages in comparison to their predecessor Combitips plus.

## The »Combitips« principle

- > Positive displacement principle (comparable to a syringe)
- > High-precision dispensing regardless of the density and viscosity of the liquid
- > Prevents aerosol contamination with hermetically sealed piston for secure dispensing and provides protection from radioactive and toxic substances
- > Quick dispensing of long series with precise, repeated dispensing of identical volumes (with the Multipette®)

## Product page:

[www.eppendorf.com/combitips](http://www.eppendorf.com/combitips)

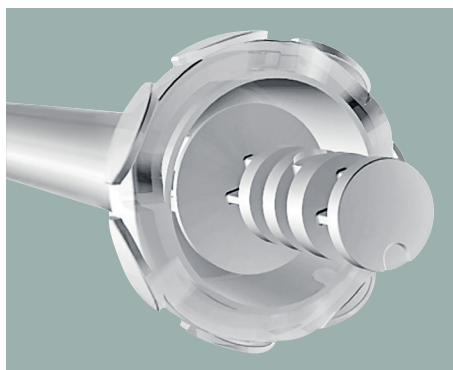


## Unmistakable Down to the Last Detail



### Intelligent packaging

With the redesigned dispenser box (for »Eppendorf Quality« and PCR clean) with extricable chute, Combitips advanced are always within reach. Portioning in 4 bags (25 pcs. each) ensures dust-free storage.



### Unmistakably Eppendorf

Combitips advanced feature the characteristic Eppendorf 3D design on the upper rim of the dispenser tip, allowing you to easily and confidently recognize the Eppendorf Original!



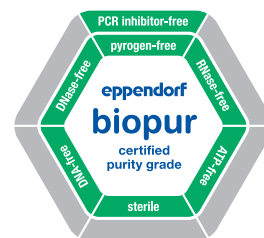
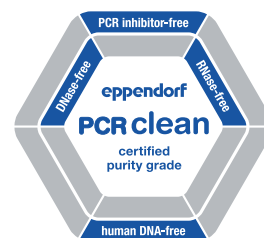
### A perfect team

Whether you are using the Multipipette E3x, Multipipette M4 or older models – Combitips advanced are optimized for all Multipipette variants to create the perfect connection!



### Always easy to reach

The Combitips advanced Box 2.0 features trouble-free and single-hand operation. The autoclavable box holds up to 8 Combitips advanced in sizes ranging from 0.1 mL to 10 mL. The transparent tray allows for the sizes of the Combitips to be easily identified using the color coding.



### Variety and selection

With 9 volume sizes (0.1 mL to 50 mL) and 4 purity grades (Eppendorf Quality™, PCR clean, Biopur® and Forensic DNA Grade) you will always find the perfect Combitip for your application! The »Biopur« tips are individually blister-wrapped and feature an access tab which makes them easier to open, even with gloves!

Additional information on Multipipette multi-dispenser pipettes can be found online:

[www.eppendorf.com/m4](http://www.eppendorf.com/m4)

[www.eppendorf.com/e3](http://www.eppendorf.com/e3)

### Technical specifications

Combitips advanced®	Min./max. volume	Increment/ step size	Volume		Systematic error*1		Random error*1	
for Multipette E3x and Combitips advanced system								
0.1 mL	1 µL	0.1 µL	1 µL	50 µL	±11.0%	±1.0%	±14.0%	±1.5%
	100 µL		10 µL	100 µL	±1.6%	±1.0%	±2.5%	±0.5%
0.2 mL	2 µL	0.2 µL	2 µL	100 µL	±4.0%	±1.0%	±5.5%	±1.0%
	200 µL		20 µL	200 µL	±1.3%	±1.0%	±1.5%	±0.5%
0.5 mL	5 µL	0.5 µL	5 µL	250 µL	±3.0%	±0.9%	±6.0%	±0.5%
	500 µL		50 µL	500 µL	±0.9%	±0.9%	±0.8%	±0.3%
1 mL	10 µL	1 µL	10 µL	500 µL	±3.5%	±0.6%	±7.0%	±0.30%
	1 mL		100 µL	1,000 µL	±0.9%	±0.6%	±0.55%	±0.20%
2.5 mL	25 µL	2.5 µL	25 µL	1,250 µL	±2.0%	±0.5%	±3.5%	±0.30%
	2.5 mL		250 µL	2,500 µL	±0.8%	±0.5%	±0.45%	±0.15%
5 mL	50 µL	5 µL	50 µL	2,500 µL	±2.5%	±0.50%	±6.0%	±0.25%
	5 mL		500 µL	5,000 µL	±0.8%	±0.50%	±0.35%	±0.15%
10 mL	100 µL	10 µL	100 µL	5,000 µL	±1.5%	±0.4%	±3.5%	±0.25%
	10 mL		1,000 µL	10,000 µL	±0.5%	±0.4%	±0.25%	±0.15%
25 mL	250 µL	25 µL	250 µL	12,500 µL	±2.5%	±0.3%	±3.0%	±0.25%
	25 mL		2,500 µL	25,000 µL	±0.3%	±0.3%	±0.35%	±0.15%
50 mL	500 µL	50 µL	500 µL	25,000 µL	±2.0%	±0.3%	±3.0%	±0.20%
	50 mL		5,000 µL	50,000 µL	±0.3%	±0.3%	±0.50%	±0.15%
for Multipette M4 and Combitips advanced system								
0.1 mL	1 µL	1 µL	1 µL	10 µL	±8.0%	±1.2%	±13.0%	±2.4%
	20 µL		2 µL	20 µL	±1.6%	±1.0%	±3.0%	±2.0%
0.2 mL	2 µL	2 µL	2 µL	10 µL	±6.0%	±0.8%	±8.0%	±1.5%
	40 µL		4 µL	40 µL	±1.3%	±0.8%	±2.0%	±1.5%
0.5 mL	5 µL	5 µL	5 µL	50 µL	±4.0%	±0.8%	±8.0%	±0.8%
	100 µL		10 µL	100 µL	±0.9%	±0.8%	±1.5%	±0.6%
1 mL	10 µL	10 µL	10 µL	100 µL	±4.0%	±0.6%	±8.0%	±0.6%
	200 µL		20 µL	200 µL	±0.9%	±0.6%	±0.9%	±0.4%
2.5 mL	25 µL	25 µL	25 µL	250 µL	±4.0%	±0.6%	±8.0%	±0.6%
	500 µL		50 µL	500 µL	±0.8%	±0.5%	±0.8%	±0.3%
5 mL	50 µL	50 µL	50 µL	500 µL	±3.0%	±0.5%	±5.0%	±0.5%
	1,000 µL		100 µL	1,000 µL	±0.6%	±0.5%	±0.6%	±0.25%
10 mL	100 µL	100 µL	100 µL	1,000 µL	±3.0%	±0.5%	±4.0%	±0.4%
	2,000 µL		200 µL	2,000 µL	±0.5%	±0.5%	±0.6%	±0.25%
25 mL	250 µL	250 µL	250 µL	2,500 µL	±3.0%	±0.3%	±3.0%	±0.5%
	5,000 µL		500 µL	5,000 µL	±0.4%	±0.3%	±0.6%	±0.25%
50 mL	500 µL	500 µL	500 µL	5,000 µL	±6.0%	±0.3%	±10.0%	±0.5%
	10,000 µL		1,000 µL	10,000 µL	±0.3%	±0.3%	±0.5%	±0.25%

\*1 The data for systematic and random errors, according to EN ISO 8655, only apply if original Eppendorf Combitips advanced are used. Technical specification are subject to change. Errors and omissions excepted.

### Compatibility of Combitips advanced with standard laboratory tubes

Combitips advanced	Eppendorf Safe-Lock Tubes				Conical tubes			Eppendorf Deepwell Plates			
	0.5 mL	1.5 mL	2.0 mL	5.0 mL	15 mL	25 mL	50 mL	96 wells/ 500 µL	96 wells/ 1000 µL	96 wells/ 2000 µL	384 wells/ 200 µL
0.1 mL	+	+	+	+	–	–	–	+	+	+	+
0.2 mL	+	+	+	+	–	–	–	+	+	+	+
0.5 mL	+	+	+	+	–	–	–	+	+	+	–
1 mL	+	+	+	+	–	+	–	+	+	+	–
2.5 mL	+	+	+	+	+	+	+	+	+	+	–
5 mL	+	+	+	+	+	+	+	+	+	+	–
10 mL	+	+	+	–	–	+	+	+	+	+	–
25 mL	–	+	+	–	–	–	–	+	+	+	–
50 mL	–	+	+	–	–	–	–	+	+	+	–

⊕ = improved compatibility compared to the Combitip plus generation

## The Third Dimension of Tip Technology



## Multipette connection

## Automatic Combitip recognition and volume calculation



## Ergonomic design

Unique funnel geometry prevents damage to gloves and ensures comfortable handling



Individually color coded

Quick identification of the desired Combitips facilitates the workflow (color coding is also visible on packaging)



**Elongated tips (for 2.5 mL, 5 mL and 10 mL)**

Complete emptying of all common tubes prevents sample loss (see table on page 4)



## Optimized graduation

## Visibility of liquid volume using optimized graduations

















**Made of virgin polypropylene**

Free of slip agents, biocides and plasticizers.





# Ordering information

Combitips® advanced	Color code	Eppendorf Quality 100 pcs. (4 bags × 25 pcs.)	PCR clean <sup>*1</sup> 100 pcs. (4 reclosable bags × 25 pcs.)	Biopur® <sup>*2</sup> 100 pcs., individually blister-wrapped	Forensic DNA Grade 100 pcs., individually blister-wrapped
0.1 mL	 white	0030 089 405	0030 089 766	0030 089 618	
0.2 mL	 light blue	0030 089 413	0030 089 774	0030 089 626	
0.5 mL	 violet	0030 089 421	0030 089 782	0030 089 634	
1.0 mL	 yellow	0030 089 430	0030 089 790	0030 089 642	0030 089 855
2.5 mL	 green	0030 089 448	0030 089 804	0030 089 650	0030 089 863
5.0 mL	 blue	0030 089 456	0030 089 812	0030 089 669	0030 089 871
10 mL	 orange	0030 089 464	0030 089 820	0030 089 677	
25 mL <sup>*3</sup>	 red	0030 089 472	0030 089 839	0030 089 685	
50 mL <sup>*3</sup>	 light gray	0030 089 480	0030 089 847	0030 089 693	
<b>ViscoTip®</b>					
10 mL	 orange	0030 089 502			
<b>Accessories</b>					
<b>Adapter advanced</b>					
25 mL, autoclavable, 1 piece	 red	0030 089 715			
25 mL, autoclavable, 7 pcs., individually wrapped	 red			0030 089 731	
50 mL, autoclavable, 1 piece	 light gray	0030 089 723			
50 mL, autoclavable, 7 pcs., individually wrapped	 light gray			0030 089 740	
<b>Combitips® advanced Box 2.0</b> , for 8 Combitips® advanced (0.1 – 10 mL), Eppendorf Quality, 1 piece		0030 089 952			
<b>Combitips® advanced Assortment Pack</b> , contains one Combitips® advanced sample of each size and Adapter advanced 25 and 50 mL, Eppendorf Quality		0030 089 936			

<sup>\*1</sup> PCR clean: batch tested and certified to be free of: human DNA, DNase, RNase, PCR inhibitors

<sup>\*2</sup> Eppendorf Biopur®: batch tested and certified to be sterile and free of: human and bacterial DNA, DNase, RNase, PCR inhibitors, ATP, pyrogen

<sup>\*3</sup> 4 boxes of 25 pcs. each. Each box containing one adapter

For more information, technical specifications and article numbers of the corresponding Multipette multi-dispensers, visit  
[www.eppendorf.com/m4](http://www.eppendorf.com/m4) for Multipette M4 and  
[www.eppendorf.com/e3](http://www.eppendorf.com/e3) for Multipette E3/E3x electronic devices.

**Your local distributor:** [www.eppendorf.com/contact](http://www.eppendorf.com/contact)  
Eppendorf SE · Barkhausenweg 1 · 22339 Hamburg · Germany  
[eppendorf@eppendorf.com](mailto:eppendorf@eppendorf.com) · [www.eppendorf.com](http://www.eppendorf.com)

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