eppendorf

DOMINIQUE DUTSCHER SAS

Combitips advanced®

Instructions for use

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DOMINIQUE DUTSCHER SAS

Table of contents

1 Operating instructions . . . 4
1.1 Using this manual . . . 4
1.2 Symbols used . . . 4
1.3 Glossary . . . 4

2 Product description . . . 7
2.1 Main illustration . . . 7
2.2 Overview of Combitips advanced with color codes . . . 7
2.3 Features . . . 7
2.4 Compatible devices . . . 8
2.5 Materials . . . 8
2.6 Evaluation criteria . . . 9
2.7 Resistance to chemicals . . . 10

3 Safety . . . 11
3.1 Intended use . . . 11
3.2 Warnings for intended use . . . 11

4 Operation . . . 13
4.1 Unpacking . . . 13
4.2 Assembling the Combitip advanced and Adapter advanced . . . 14
4.3 Inserting the Combitip . . . 15
4.4 Dispense liquid . . . 15

5 Maintenance . . . 16
5.1 Cleaning . . . 16
5.1.1 Autoclaving the Adapter advanced . . . 16
5.1.2 Autoclaving the Combitips advanced Rack . . . 16

6 Technical data . . . 16
6.1 Ambient conditions . . . 16
6.2 Errors with the Multipette M4/Repeater M4 . . . 17
6.3 Errors with the Multipette plus/Repeater plus . . . 19
6.4 Errors with the Multipette (X)stream/Repeater (X)stream . . . 20
6.5 Adjustable dispensing volumes . . . 22

7 Purity grades and certificates . . . 23
7.1 Eppendorf purity grades . . . 23
7.2 Certificates . . . 23

8 Ordering Information . . . 24
8.1 Combitips advanced . . . 24
8.2 Accessories . . . 26
8.3 Multipette plus/Repeater plus . . . 27
8.4 Multipette (X)stream/Repeater (X)stream . . . 27

9 Transport, storage and disposal . . . 28
9.1 Storage . . . 28

DOMINIQUE DUTSCHER SAS

1 Operating instructions

1.1 Using this manual

- Please read these instructions for use completely before using the Combitips advanced for the first time. Also read the operating manual of the dispenser used.

1.2 Symbols used

Symbol	Meaning
▸	You are requested to perform an action.
1. 2.	Perform these actions in the sequence described.
•	List.
	References useful information.

1.3 Glossary

A

Adapter advanced
Connecting piece for the dispenser when using Combitips advanced 25 mL and 50 mL

B

Biopur
Eppendorf Biopur® is an Eppendorf AG purity level for consumables. Eppendorf Biopur® meets the requirements for standard products, e.g., precision, accuracy, wetting behavior, tightness. Eppendorf Biopur® also fulfills the requirements with regard to sterility, absence of ATP, PCR inhibitors, human and bacterial DNA, pyrogen, DNase and RNase.
Consumables with the Biopur purity grade are controlled and certified by an external laboratory. Certificates are available for downloading from our webpage www.eppendorf.com.

C

Coding
The dispenser uses the Compitip coding to detect the volume of the Combitips.

Color code
The color code displays the volume.

D

Dispensing volume
Volume per dispensing step.

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E

Eppendorf Quality
Eppendorf Quality is an Eppendorf AG purity grade for consumables. Eppendorf Quality meets the requirements for standard products, e.g., precision, accuracy, wetting behavior and tightness.

G

Graduation
Incremental graduation of a range, a surface or a volume.

M

Maximum volume
The maximum volume that can be used for dispensing.

N

Nominal volume
The maximum dispensing volume of a Combitip in conjunction with the selected dispensing device. The term "nominal volume" comes from the ISO 8655 standard.

P

PCR clean
PCR clean is an Eppendorf AG purity grade for consumables. PCR clean meets the requirements for standard products, e.g., precision, accuracy, wetting behavior, tightness. PCR clean also meets the requirements with regard to absence of human DNA, DNase, RNase and PCR inhibitors.
Consumables with the PCR clean purity grade are controlled and certified by an external laboratory. Certificates are available for downloading from our webpage www.eppendorf.com.

Positive displacement principle
The liquid comes into direct contact with the Combitip piston during aspiration and dispensing. Unlike with a pipette, the liquid and piston are not separated by an air cushion. A small air bubble is visible at the piston during dispensing.

R

Random error
Precision. Describes how large the deviations of several measurements are from each other, if the same volume is measured several times.

Remaining stroke
Liquid reserve. The liquid which remains after all dispensing steps have been completed. You can discard the liquid of the remaining stroke or reuse it.

Reverse stroke
After aspiration, the piston is moved into a defined position. Liquid is dispensed during this piston movement. The reverse stroke is not a dispensing step.

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S

Sterile
Sterile Eppendorf AG purity grade for consumables. Sterile meets the requirements for standard products, e.g., precision, accuracy, wetting behavior, tightness. Sterile also meets the requirements with regard to sterility and freedom from pyrogens.

Systematic error
Accuracy. Describes how close the average value of several measurements of the same volume is to the actual value.

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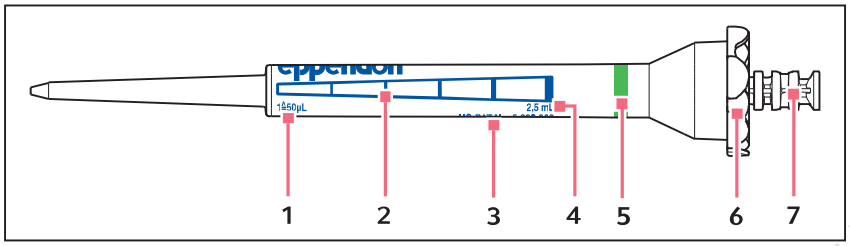
2 Product description

2.1 Main illustration



1 **Dispensing volume with the manual dispenser at selection dial position 1**

2 **Graduation**

3 **US patent numbers**

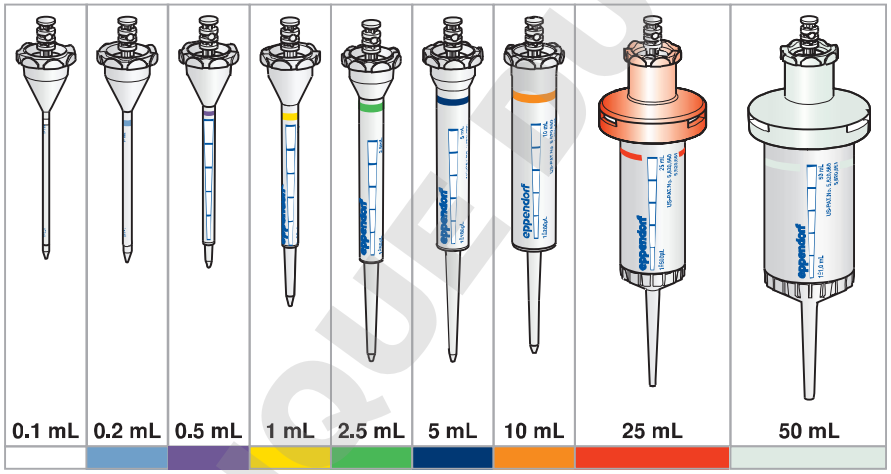
4 **Maximum volume**

5 **Color code**

6 **Coding**

7 **Piston**

2.2 Overview of Combitips advanced with color codes



2.3 Features

Combitips advanced are disposable devices for aspirating and dispensing liquids according to the positive displacement principle. Combitips advanced are used in Eppendorf dispensers (e.g., Multipettes/ Repeaters) and are made up of a cylinder and a piston. Combitips advanced in sizes 25 mL and 50 mL require an Adapter advanced. Combitips advanced are available in various sizes, which are marked using a color code.

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2.4 Compatible devices

The Combitips advanced can be used with the following Eppendorf dispensers:

Dispenser	Dispensing range
Multipette 4780/Repeater 4780	2 µL – 5 mL
Multipette plus/Repeater plus	1 µL – 10 mL
Multipette pro/Repeater pro	1 µL – 50 mL
Multipette stream/Repeater stream	1 µL – 50 mL
Multipette Xstream/Repeater Xstream	1 µL – 50 mL
EDOS 5222	1 µL – 50 mL

2.5 Materials

NOTICE! Aggressive substances may damage dispensers, Combitips and accessories.

- Check the chemical resistance when using organic solvents or aggressive chemicals.

Combitip advanced	Material
Cylinder	Polypropylene (PP)
Piston 0.1 mL and 0.2 mL	Polyethylene (PE) with glass fiber (GF)
Piston 0.5 mL to 50 mL	Polyethylene (PE)
Adapter advanced	Polybutylene terephthalate (PBT)

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2.6 Evaluation criteria

The Combitips advanced can be used for the single dispensing of all chemicals which are included in the following tables.

■■■	**Resistant** The chemical can be used.
■■	**Limited resistance and/or suitable for limited use** The chemical can be used for a limited period of time. Dispensing must be performed soon after filling in order to ensure the tightness of the Combitips advanced and to avoid damage to the dispenser. Prolonged contact may negatively affect the error and the printing of the Combitips advanced may become discolored and detached.
■	**Increased risk and/or increased wear** The chemical can only be used with utmost caution. Dispensing must be performed immediately after filling in order to ensure the tightness of the Combitips advanced and to avoid damage to the Combitips advanced and to the dispenser. Prolonged contact may negatively affect the error and the printing of the Combitips advanced may become discolored or detached.

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2.7 Resistance to chemicals

Acids and bases	Concentration in %	Resistance
Ammonia solution	25	■■■
Ammonia solution	2.0	■■■
Acetic acid	96	■■■
Acetic acid	12	■■■
Caustic soda	20	■■■
Caustic soda	4.0	■■■
Perchloric acid	10	■■■
Nitric acid	65	■■
Nitric acid	6.3	■■■
Hydrochloric acid	32	■■■
Hydrochloric acid	3.6	■■■
Sulfuric acid	96	■■■
Sulfuric acid	16	■■■
Trichloroacetic acid	40	■■
Trichloroacetic acid	10	■■■
Trifluoroacetic acid	100	■■
Trifluoroacetic acid	10	■■■

Organic solvents	Concentration in %	Resistance
Acetone		■■
Acetonitrile		■■■
Petroleum ether		■■
Chloroform		■■
Dichloromethane		■■
Diethyl ether		■■
Dimethyl sulfoxide	100	■
Acetic acid ethyl ester		■■■
Ethanol	96	■■■
Formaldehyde	37	■■■
Isoamyl alcohol		■■
Isopropanol		■■■
Methanol		■■■
Phenol		■■
Carbon tetrachloride		■■
Toluol		■■
Xylol		■■

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3 Safety

3.1 Intended use

Combitips advanced are intended to be used with a Multipette/Repeater or a EDOS 5222 for dispensing liquids in the 1 µL – 50 mL volume range. In-vivo applications (applications in or on the human body) are not permitted. The Combitips advanced may only be used by specialized staff who have been adequately trained. The user must carefully read the instructions for use and the operating manual of the dispenser used and become familiar with how the device works.

3.2 Warnings for intended use

WARNING! Damage to health due to infectious liquids and pathogenic germs.

- When handling infectious liquids and pathogenic germs, observe the national regulations, the biological security level of your laboratory, the material safety data sheets, and the manufacturer's application notes.
- Wear personal protective equipment.
- Follow the instructions regarding hygiene, cleaning and decontamination.
- For complete instructions regarding the handling of germs or biological material in risk group II or higher, please refer to the "Laboratory Biosafety Manual" (source: World Health Organization, current edition of the Laboratory Biosafety Manual).

WARNING! Damage to health due to toxic, radioactive or aggressive chemicals.

- Wear personal protective equipment.
- Observe the national regulations for handling these substances.
- Observe the material safety data sheets and manufacturer's application notes.

NOTICE! Carry-over, contamination and incorrect dispensing results due to the incorrect use of Combitips.
Combitips are intended for single use. Prolonged use can have a negative impact on dispensing accuracy.

- Only use Combitips once.
- Do not use washed and/or autoclaved Combitips for dispensing.

NOTICE! Incorrect dispensing results due to evaporation.
If dispensing with an already filled Combitip is continued after a long waiting time, the next dispensing step may have a slightly reduced dispensing volume due to evaporation!

- If high trueness is required, this dispensing step should not be carried out.

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WARNING! Personal injury and material damage from a bursting Combitip.
If stored for a long period of time, liquids can crystallize or solidify and thus block the outlet opening. The Combitip advanced may burst during the process of dispensing.

- Check the consistency of the liquid.
- Dispense immediately after liquid aspiration.

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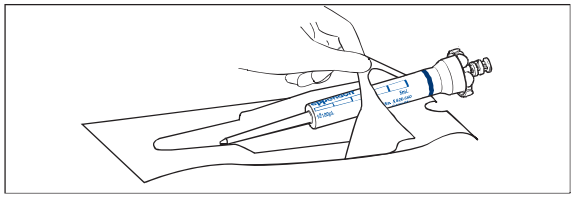
4 Operation

4.1 Unpacking

To ensure maximum protection from carry-over, use Combitips advanced with Sterile and Biopur grades of purity immediately after they have been removed from their packing.



1. Open the packing at the location indicated.
2. Insert the Combitip into the dispenser.
3. Insert the Combitip into the dispenser.

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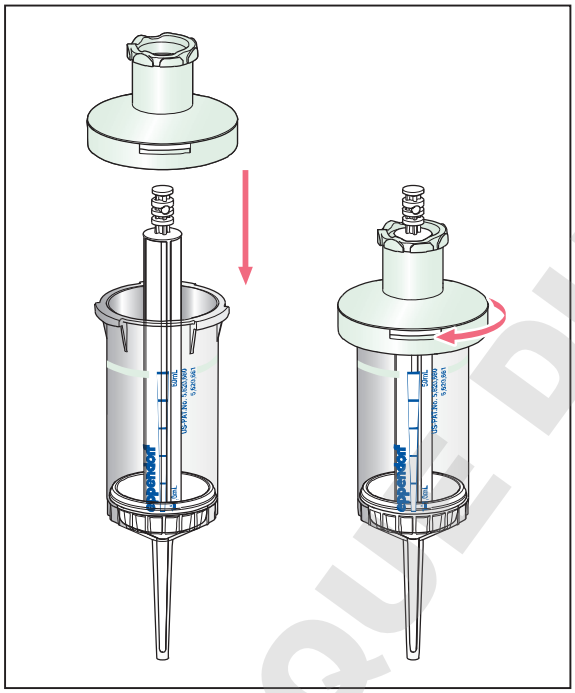
4.2 Assembling the Combitip advanced and Adapter advanced

Combitips advanced with a maximum volume of 0.1 mL – 10 mL can be used immediately. Combitips advanced with a maximum volume of 25 mL and 50 mL can only be used with the corresponding Adapter advanced. Adapter advanced and Combitips advanced have the same color code. The maximum volume is also listed on the neck of the Adapter advanced.

NOTICE! Sensor damage due to damaged or worn adapter

- Always put the adapter and Combitip together outside of the dispenser.
- Do not used damaged or worn adapters.
- Do not use adapters with damaged coding.



1. Place the adapter on the Combitip.
2. Tighten the adapter.

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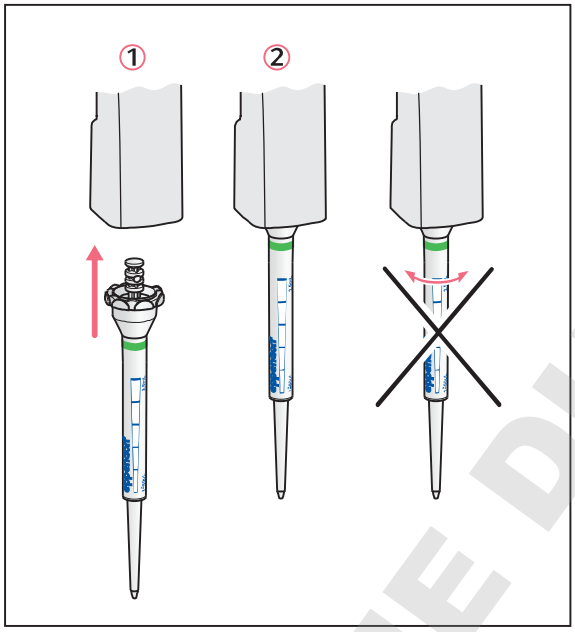
4.3 Inserting the Combitip

NOTICE! Device damage due to incorrect handling of the inserted Combitip

- Insert the Combitip straight into the dispenser from below.
- Do not rotate the inserted Combitip.
- Never grip the dispenser using the Combitip.

The Combitip is easier to insert if the ejector is held pressed down during insertion.



1. If the Combitip piston has been pushed out, push it back into the cylinder of the Combitip.
2. Use force to push the Combitip into the opening on the lower side of the dispenser ① until the Combitip engages ②.

4.4 Dispense liquid

The liquid dispensing angle should always be as steep as possible. A dispensing angle greater than 45° can result in an incorrect dispensing volume during the final dispensing steps.

Additional information can be found in the operating manual of your dispenser.

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5 Maintenance

5.1 Cleaning

Combitips advanced are not autoclavable. Adapter advanced and Combitips advanced Rack are autoclavable.

5.1.1 Autoclaving the Adapter advanced

- Rinse the Adapter advanced with water.
- Autoclave the Adapter advanced for 20 min at an overpressure of 1 bar and 121 °C. The Adapter advanced can be autoclaved up to 100 times.

5.1.2 Autoclaving the Combitips advanced Rack

- Autoclave the empty Combitips advanced Rack for 20 min at an overpressure of 1 bar and 121 °C. Empty Combitips advanced Rack can be autoclaved up to 100 times.

6 Technical data

6.1 Ambient conditions

Ambience	For indoor use only.
Ambient temperature	4 °C – 40 °C
Relative humidity	10 % – 95 %, non-condensing
Atmospheric pressure	79.5 kPa – 166 kPa

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6.2 Errors with the Multipette M4/Repeater M4

Combitip advanced	Testing volume	Error limits			
		Error			
		Systematic error		Random error	
		± %	± µL	± %	± µL
0.1 mL white Increment: 1 µL	2 µL	±1.6	±0.032	±3.0	±0.06
	20 µL	±1.0	±0.2	±2.0	±0.4
0.2 mL light blue Increment: 2 µL	4 µL	±1.3	±0.052	±2.0	±0.08
	40 µL	±0.8	±0.32	±1.5	±0.6
0.5 mL purple Increment: 5 µL	10 µL	±0.9	±0.09	±1.5	±0.15
	100 µL	±0.8	±0.8	±0.6	±0.6
1 mL yellow Increment: 10 µL	20 µL	±0.9	±0.18	±0.9	±0.18
	200 µL	±0.6	±1.2	±0.4	±0.8
2.5 mL green Increment: 25 µL	50 µL	±0.8	±0.4	±0.8	±0.4
	500 µL	±0.5	±2.5	±0.3	±1.5
5 mL blue Increment: 50 µL	100 µL	±0.6	±0.6	±0.6	±0.6
	1 000 µL	±0.5	±5.0	±0.25	±2.5
10 mL orange Increment: 0.1 mL	200 µL 0.2 mL	±0.5	±1.0	±0.6	±1.2
	2 000 µL 2 mL	±0.5	±10	±0.25	±5.0
25 mL red Increment: 0.25 mL	500 µL 0.5 mL	±0.4	±2.0	±0.6	±3.0
	5 000 µL 5 mL	±0.3	±15	±0.25	±12.5
50 mL light gray Increment: 0.5 mL	1 000 µL 1 mL	±0.3	±3.0	±0.5	±5.0
	10 000 µL 10 mL	±0.3	±30	±0.3	±30

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Test conditions and test evaluation in compliance with ISO 8655, Part 6. Analytical balance with evaporation protection inspected by the office of weights and measures..

- Number of determinations: 10
- Use of water in accordance with ISO 3696
- Inspection at 20 °C – 25 °C ±0.5 °C
- Dispensing on the inner wall of the tube

The test volumes for the systematic and random errors of the Multipette M4/Repeater M4 comply with the requirements of ISO 8655, part 5.

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6.3 Errors with the Multipette plus/Repeater plus

Combitip advanced	Volume range	Error limits			
		Error			
		Systematic error		Random error	
		± %	± µL	± %	± µL
0.1 mL white	2 µL	±1.6	±0.032	±3.0	±0.06
	20 µL	±1.0	±0.2	±2.0	±0.4
0.2 mL light blue	4 µL	±1.3	±0.052	±2.0	±0.08
	40 µL	±0.8	±0.32	±1.5	±0.6
0.5 mL purple	10 µL	±0.9	±0.09	±1.5	±0.15
	100 µL	±0.8	±0.8	±0.6	±0.6
1 mL yellow	20 µL	±0.9	±0.18	±0.9	±0.18
	200 µL	±0.6	±1.2	±0.4	±0.8
2.5 mL green	50 µL	±0.8	±0.4	±0.8	±0.4
	500 µL	±0.5	±2.5	±0.3	±1.5
5 mL blue	100 µL	±0.6	±0.6	±0.6	±0.6
	1 000 µL	±0.5	±5.0	±0.25	±2.5
10 mL orange	200 µL	±0.5	±1.0	±0.6	±1.2
	2 000 µL	±0.5	±10	±0.25	±5.0
25 mL red	500 µL	±0.4	±2.0	±0.6	±3.0
	5 000 µL	±0.3	±15	±0.25	±12.5
50 mL light gray	1 000 µL	±0.3	±3.0	±0.5	±5.0
	10 000 µL	±0.3	±30	±0.3	±30

Test conditions and test evaluation in compliance with ISO 8655, Part 6. Analytical balance with evaporation protection inspected by the office of weights and measures.

- Number of determinations: 10
- Use of water in accordance with ISO 3696
- Inspection at 20 °C – 25 °C ±0.5 °C
- Dispensing on the inner wall of the tube

The test volumes for the systematic and random errors of the Multipette (X)stream/Repeater (X)stream comply with the requirements of ISO 8655, part 5.

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6.4 Errors with the Multipette (X)stream/Repeater (X)stream

Combitip advanced	Volume range	Testing volume	Error limits			
			Error			
			Systematic error		Random error	
			± %	± µL	± %	± µL
0.1 mL white Increment: 0.1 µL	1 µL – 100 µL	10 µL	±1.6	±0.16	±2.5	±0.25
		50 µL	±1.0	±0.5	±1.5	±0.75
		100 µL	±1.0	±1.0	±0.5	±0.5
0.2 mL light blue Increment: 0.2 µL	2 µL – 200 µL	20 µL	±1.3	±0.26	±1.5	±0.3
		100 µL	±1.0	±1.0	±1.0	±1.0
		200 µL	±1.0	±2.0	±0.5	±1.0
0.5 mL purple Increment: 0.5 µL	5 µL – 500 µL	50 µL	±0.9	±0.45	±0.8	±0.4
		250 µL	±0.9	±2.25	±0.5	±1.25
		500 µL	±0.9	±4.5	±0.3	±1.5
1 mL yellow Increment: 1 µL	10 µL – 1 000 µL	100 µL	±0.9	±0.9	±0.55	±0.55
		500 µL	±0.6	±3.0	±0.3	±1.5
		1 000 µL	±0.6	±6.0	±0.2	±2.00
2.5 mL green Increment: 2.5 µL	25 µL – 2 500 µL	250 µL	±0.8	±2.0	±0.45	±1.125
		1 250 µL	±0.5	±6.25	±0.3	±3.75
		2 500 µL	±0.5	±12.5	±0.15	±3.75
5 mL blue Increment: 5 µL	50 µL – 5 000 µL	500 µL	±0.8	±4.0	±0.35	±1.75
		2 500 µL	±0.5	±12.5	±0.25	±6.25
		5 000 µL	±0.5	±25	±0.15	±7.50
mL	**mL**	**mL**	**± %**	**± mL**	**± %**	**± mL**
10 mL orange Increment: 0.01 mL	0.1 mL – 10 mL	1 mL	±0.5	±0.005	±0.25	±0.0025
		5 mL	±0.4	±0.02	±0.25	±0.0125
		10 mL	±0.4	±0.04	±0.15	±0.015
25 mL red Increment: 0.025 mL	0.25 mL – 25 mL	2.5 mL	±0.3	±0.0075	±0.35	±0.0088
		12.5 mL	±0.3	±0.0375	±0.25	±0.0313
		25 mL	±0.3	±0.075	±0.15	±0.0375
50 mL light gray Increment: 0.05 mL	0.5 mL – 50 mL	5 mL	±0.3	±0.015	±0.5	±0.025
		25 mL	±0.3	±0.075	±0.20	±0.05
		50 mL	±0.3	±0.15	±0.15	±0.075

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Test conditions and test analysis in accordance with ISO 8655, part 6. Test with an analytical balance with a moisture trap which has been inspected by the Office of Weights and Measures.

- Number of determinations: 10
- Use of water in accordance with ISO 3696
- Inspection at 20 °C – 25 °C ± 0.5 °C
- Dispensing onto the tube wall
- Volume tests in the mode Dis
- Speed levels set: 7

The test volumes for the systematic and random error of the Multipette (X)stream/Repeater (X)stream comply with the requirements of ISO 8655, part 5.

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6.5 Adjustable dispensing volumes

Applies to following dispensers:

- Multipette M4/Repeater M4
- Multipette plus/Repeater plus

Selection dial	Dispensing steps	0.1 mL white	0.2 mL light blue	0.5 mL purple	1.0 mL yellow	2.5 mL green	5.0 mL blue	10 mL orange	25 mL red	50 mL light gray
•	100	1.0 µL	2.0 µL	5.0 µL	10 µL	25 µL	50 µL	0.1 mL	0.25 mL	0.5 mL
1	50	2.0 µL	4.0 µL	10 µL	20 µL	50 µL	100 µL	0.2 mL	0.50 mL	1.0 mL
•	33	3.0 µL	6.0 µL	15 µL	30 µL	75 µL	150 µL	0.3 mL	0.75 mL	1.5 mL
2	25	4.0 µL	8.0 µL	20 µL	40 µL	100 µL	200 µL	0.4 mL	1.00 mL	2.0 mL
•	20	5.0 µL	10 µL	25 µL	50 µL	125 µL	250 µL	0.5 mL	1.25 mL	2.5 mL
3	16	6.0 µL	12 µL	30 µL	60 µL	150 µL	300 µL	0.6 mL	1.50 mL	3.0 mL
•	14	7.0 µL	14 µL	35 µL	70 µL	175 µL	350 µL	0.7 mL	1.75 mL	3.5 mL
4	12	8.0 µL	16 µL	40 µL	80 µL	200 µL	400 µL	0.8 mL	2.00 mL	4.0 mL
•	11	9.0 µL	18 µL	45 µL	90 µL	225 µL	450 µL	0.9 mL	2.25 mL	4.5 mL
5	10	10 µL	20 µL	50 µL	100 µL	250 µL	500 µL	1.0 mL	2.50 mL	5.0 mL
•	9	11 µL	22 µL	55 µL	110 µL	275 µL	550 µL	1.1 mL	2.75 mL	5.5 mL
6	8	12 µL	24 µL	60 µL	120 µL	300 µL	600 µL	1.2 mL	3.00 mL	6.0 mL
•	7	13 µL	26 µL	65 µL	130 µL	325 µL	650 µL	1.3 mL	3.25 mL	6.5 mL
7	7	14 µL	28 µL	70 µL	140 µL	350 µL	700 µL	1.4 mL	3.50 mL	7.0 mL
•	6	15 µL	30 µL	75 µL	150 µL	375 µL	750 µL	1.5 mL	3.75 mL	7.5 mL
8	6	16 µL	32 µL	80 µL	160 µL	400 µL	800 µL	1.6 mL	4.00 mL	8.0 mL
•	5	17 µL	34 µL	85 µL	170 µL	425 µL	850 µL	1.7 mL	4.25 mL	8.5 mL
9	5	18 µL	36 µL	90 µL	180 µL	450 µL	900 µL	1.8 mL	4.50 mL	9.0 mL
•	5	19 µL	38 µL	95 µL	190 µL	475 µL	950 µL	1.9 mL	4.75 mL	9.5 mL
10	5	20 µL	40 µL	100 µL	200 µL	500 µL	1000 µL	2.0 mL	5.00 mL	10.0 mL

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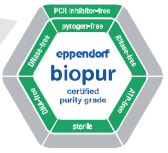
7 Purity grades and certificates

7.1 Eppendorf purity grades

	Eppendorf Quality	Sterile	PCR clean	Biopur
				
Human DNA-free			■	■
DNA-free (Human + Bacteria DNA-free)				■
DNase-free			■	■
RNase-free			■	■
PCR inhibitor-free			■	■
ATP-free				■
Pyrogen-free (Endotoxin-free)		■		■
Sterile (Ph.Eur./USP)		■		■

7.2 Certificates

Various certificates for Eppendorf consumables can be downloaded from our website www.eppendorf.de/consumables.

- Batch-specific certificates
  Batch-specific certificates are available for Eppendorf consumables with Sterile, PCR clean and Biopur degrees of purity. These certificates are produced by an independent, recognized laboratory. The batch number can be found on the label of the folding box.
- General quality certificates
- ISO certificate

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8 Ordering Information

8.1 Combitips advanced

Order no. (International)	Order no. (North America)	Description
		Combitips advanced 0.1 mL
		100 pieces
0030 089.405	0030089405	Eppendorf Quality
–	0030089510	Sterile, individually wrapped
0030 089.618	0030089618	Biopur, individually wrapped
0030 089.766	–	PCR clean
		Combitips advanced 0.2 mL
		100 pieces
0030 089.413	0030089413	Eppendorf Quality
–	0030089529	Sterile, individually wrapped
0030 089.626	0030089626	Biopur, individually wrapped
0030 089.774	–	PCR clean
		Combitips advanced 0.5 mL
		100 pieces
0030 089.421	0030089421	Eppendorf Quality
–	0030089537	Sterile, individually wrapped
0030 089.634	0030089634	Biopur, individually wrapped
0030 089.782	–	PCR clean
		Combitips advanced 1.0 mL
		100 pieces
0030 089.430	0030089430	Eppendorf Quality
–	0030089545	Sterile, individually wrapped
0030 089.642	0030089642	Biopur, individually wrapped
0030 089.790	–	PCR clean
		Combitips advanced 2.5 mL
		100 pieces
0030 089.448	0030089448	Eppendorf Quality
–	0030089553	Sterile, individually wrapped
0030 089.650	0030089650	Biopur, individually wrapped
0030 089.804	–	PCR clean
		Combitips advanced 5.0 mL
		100 pieces
0030 089.456	0030089456	Eppendorf Quality
–	0030089561	Sterile, individually wrapped
0030 089.669	0030089669	Biopur, individually wrapped
0030 089.812	–	PCR clean

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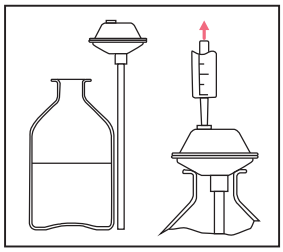
Order no. (International)	Order no. (North America)	Description
		Combitips advanced 10 mL
		100 pieces
0030 089.464	0030089464	Eppendorf Quality
–	0030089570	Sterile, individually wrapped
0030 089.677	0030089677	Biopur, individually wrapped
0030 089.820	–	PCR clean
		Combitips advanced 25 mL
		100 pieces + 4 Adapter
0030 089.472	0030089472	Eppendorf Quality
–	0030089588	Sterile, individually wrapped
0030 089.685	0030089685	Biopur, individually wrapped
0030 089.839	–	PCR clean
		Combitips advanced 50 mL
		100 pieces + 4 Adapter
0030 089.480	0030089480	Eppendorf Quality
–	0030089596	Sterile, individually wrapped
0030 089.693	0030089693	Biopur, individually wrapped
0030 089.847	–	PCR clean

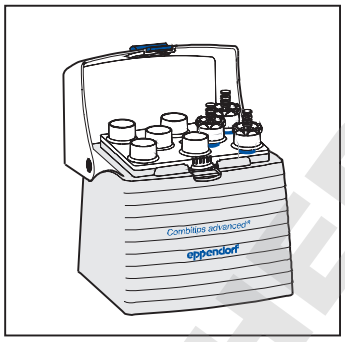
Order no. (International)	Order no. (North America)	Description
		Adapter advanced 25 mL
		1 piece
0030 089.715	0030089715	Eppendorf Quality
		Adapter advanced 50 mL
		1 piece
0030 089.723	0030089723	Eppendorf Quality
		Adapter advanced 25 mL
		7 pieces
0030 089.731	0030089731	Biopur, individually wrapped
		Adapter advanced 50 mL
		7 pieces
0030 089.740	0030089740	Biopur, individually wrapped

DOMINIQUE DUTSCHER SAS

8.2 Accessories



Combilong/Combitube
The Combilong/Combitube is an aspiration tool for the Combitips advanced. It enables liquids to be directly taken out of all bottles.



Combitips advanced Rack
A Combitips advanced Rack is available for storing the Combitips advanced (≤ 10 mL).

Order no. (International)	Order no. (North America)	Description
0030 059.506	–	**Combilong** Aspirating aid for removing liquids from volumetric flasks and tall bottles 2 pieces
–	022261550	**Combitube** Aspirating aid for removing liquids from volumetric flasks and tall bottles 2 pieces
0030 089.758	0030089758	**Combitips advanced Rack** 1 piece Eppendorf Quality

DOMINIQUE DUTSCHER SAS

8.2.1 Multipette M4/Repeater M4

Order no. (International)	Order no. (North America)	Description
4982 000.012	–	**Multipette M4**
–	4982000020	**Repeater M4**
4982 000.314	–	**Multipette M4 Starter Kit** Multipette M4, Combitip Rack, Combitip Assortmentpack
–	4982000322	**Repeater M4 Starter Kit** Repeater M4, Combitip Rack, Combitip Assortmentpack

8.3 Multipette plus/Repeater plus

Order no. (International)	Order no. (North America)	Description
4981 000.019	–	**Multipette plus**
–	022260201	**Repeater plus**

8.4 Multipette (X)stream/Repeater (X)stream

Order no. (International)	Order no. (North America)	Description
4986 000.017	–	**Multipette stream**
4986 000.025	–	**Multipette Xstream**
–	022460803	**Repeater stream**
–	022460811	**Repeater Xstream**

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9 Transport, storage and disposal

9.1 Storage

NOTICE! Damage due to UV radiation

- Do not store consumables in areas with strong UV radiation.

	Air temperature	Relative humidity	Atmospheric pressure
In transport packaging	-25 °C – 45 °C	10 % – 95 %	70 kPa – 106 kPa
Without transport packaging	-5 °C – 45 °C	10 % – 95 %	70 kPa – 106 kPa

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