



NEW!

Say “hello” to MixMate®!

The all-around mixer for small volumes

eppendorf

The science of mixing

MixMate: efficient and versatile mixing on a microliter scale

Think there's nothing to mixing?

It's something you do every day. It's routine. You might say mixing is trivial—maybe even boring. Well, you're not alone.

But we wanted to “dispel” this myth once and for all, so we put our developers on the case. They set up real applications to demonstrate exactly how these physical forces behave on a microliter scale.

And guess what?

Their experiments, analyses and calculations showed that there is much more to the science of mixing than you think. It's challenging. It's complex. Exciting, even—anything but boring!

And we have taken their findings and used them to help create our newest innovation:

Eppendorf MixMate

Compact and amazingly versatile, benchtop MixMate can be used for virtually any mixing application. It accommodates micro test tubes, PCR plates, deepwell plates and MTPs. It features an integrated vortexing function and an operating concept that is as simple as it is intelligent.

Rediscover the science of mixing. Say “hello” to MixMate!

$$F = m\omega^2 r$$
$$\omega = 2\pi f$$

- Angular frequency ω and centripetal force F are two determining factors for efficient mixing.



Eppendorf MixMate at a glance

Diversity included!

MixMate takes up an area of just 6.7 x 9.1 in/17 x 23 cm—less than the size of this brochure—with many options for holding a wide variety of tubes and plates:

Product features

Mixing in a 3-in-1 format

- Plates (up to 96- and 384-well formats)
 - PCR plates (skirted, semiskirted, unskirted)
 - Deepwell plates
 - MTPs
- Tubes
 - 0.2 ml PCR tubes and PCR strips
 - 0.5 ml micro test tubes
 - 1.5 ml micro test tubes
 - 2.0 ml micro test tubes
- Vortexing numerous tube formats

Key benefits

- ²⁰Mix-Control
 - Optimized mixing
 - Antispill technology
- 3-in-1 format allows great flexibility
- Preprogrammed soft keys
- Reliable universal holder
- Automatic imbalance detection— a common feature in centrifuges
- Digital display
- Extremely quiet operation (<50 dB(A))
- Integrated vortex function
- IvD conformity
- 2-year warranty

Applications

Rapid, controlled mixing enables homogeneous experimental conditions from well to well/tube to tube and thus increases reproducibility. Applications include:

- Mixing PCR preparations
- Resuspending pellets (e.g., bacteria, DNA, cell culture pellets)
- Incubation (e.g., ELISA assays)
- Quantification of proteins using colorimetric dyes (e.g., Bradford, Lowry, BCA)
- Reporter gene assays (e.g., β -galactosidase, luciferase assay)
- Mixing restriction preparations
- Vortexing numerous tube formats

For more information, go to www.eppendorf.com/MixMate

One device— one package!

MixMate comes standard with three tube holders:

- Tube Holder PCR 96
- Tube Holder 0.5 ml
- Tube Holder 1.5/2.0 ml

(For ordering information, see back cover)



Space required by the Eppendorf MixMate (6.7 x 9.1 in/17 cm x 23 cm)

Everything under control

^{2D}Mix-Control: uniquely fast and controlled mixing movement

Current findings show that rpm speed is not the only determining factor in efficiently mixing small volumes. More often, the perfect mixing process occurs when parameters such as speed, type of mixing movement (e.g., orbital) and the mixing radius are optimized to smoothly run together.

Eppendorf has perfected how these parameters interact in MixMate, and we have named this feature ^{2D}Mix-Control.

Optimized mixing

- Perfect mixing radius combined with perfect, 2-dimensional mixing and adjustable mixing speed ensure rapid and complete mixing of even the smallest volumes.

Anti-spill technology

- Perfectly controlled 2-dimensional mixing prevents spilling and/or lid wetting, eliminating any need for centrifugation after mixing.

- ^{2D}Mix-Control stands for rapid and controlled mixing with anti-spill technology.



The ease of mixing

Safety and convenience in minimal space

Preprogrammed soft keys

MixMate features separate soft keys for each tube type—simply press the key that corresponds to the type of tube you are using, and MixMate will automatically run the ideal mixing frequency/duration. The benefits? Simplified operation and thorough mixing without any spillage or lid wetting.

Reliable universal holder

Three stainless steel springs in the universal holder ensures safety and stability of all tube/plate formats—even at the highest mixing frequencies.

Extremely quiet operation (<50 dB(A))

No rattling, no vibrating—even at maximum load. Highly accurate processing and cutting-edge technology eliminate vibrations for a relaxed working environment.

Automatic imbalance detection

Automatic imbalance detection (a common feature in centrifuges) prevents plates from jumping out of the holder in critical mixing situations—no sample loss!

3-in-1 format allows great flexibility

Mixing of plates and tubes, plus a vortexing function—all in a single device. A new kind of universal holder and a new tube holder design make MixMate the only device in its class that can controllably mix all plate formats and micro test tubes up to 2.0 ml.

High stability

The tried and tested stability design (perfected with the Eppendorf Thermomixer®) ensures absolute sturdiness—even at maximum mixing frequencies.

Digital display

The easy-to-read display facilitates simple and accurate setting/viewing of mixing duration and speed—for maximum control over your experimental parameters.

Integrated vortex function

The vortex feature is enhanced with a 2-second overrun for an ergonomic work process and continuous vortexing.

- The touch vortex function also features an innovative 2-second overrun for an ergonomic work process and continuous vortexing.



- Preprogrammed soft keys

Eppendorf MixMate

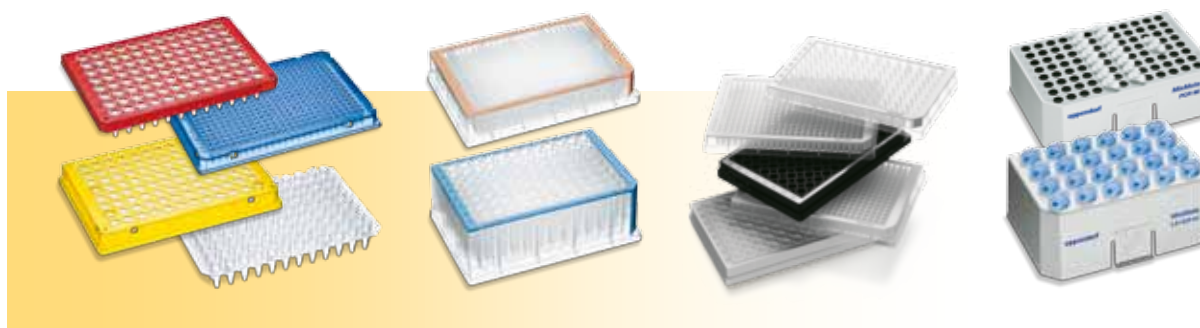
Technical specifications

Power supply:	120 V ±10%, 50–60 Hz 230 V ±10%, 50–60 Hz
Power consumption:	40 W
Dimensions (W x D x H):	6.7 x 9.1 x 5.1 in/17 x 23 x 13 cm
Weight:	9.25 lb/4.2 kg
Noise level:	< 50 dB(A)
Mixing frequency:	300 to 3,000 rpm (in 50 rpm increments)
Touch vortexing frequency:	3,500 rpm
Adjustable mixing time:	15 s to 99.5 h; continuous
Mixing and vortexing radius:	1.5 mm (3 mm mixing stroke)

Technical specifications subject to change!

Ordering information

Description	Catalog No.
MixMate , incl. 3 tube holders: PCR 96, 0.5 ml, 1.5/2.0 ml 120 V 230 V	022674200 022674226
Tube Holder PCR 96 , for 96 x 0.2 ml PCR tubes, PCR strips or 96-well PCR plates (semiskirted or unskirted)	022674005
Tube Holder 0.5 ml , for 24 x 0.5 ml micro test tubes	022674021
Tube Holder 1.5/2.0 ml , for 24 x 1.5 ml or 2.0 ml micro test tubes	022674048



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