

Spend More Time with the Family!

Heating • Mixing • Cooling

**eppendorf**

# Big Family Reunion

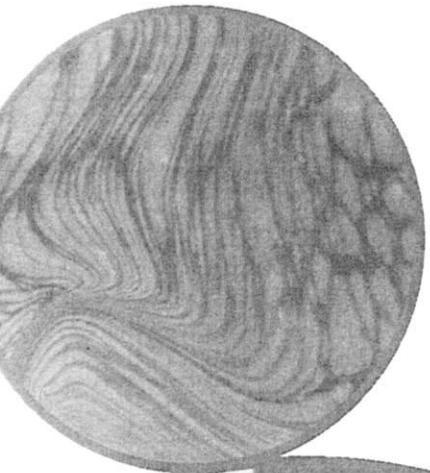
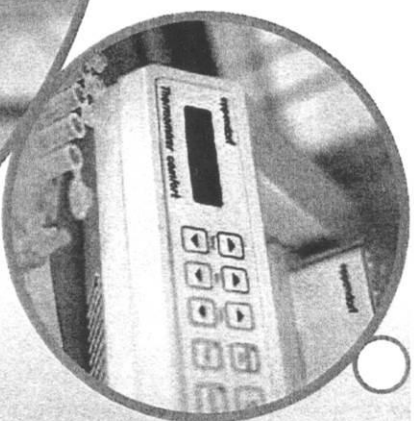
## Eppendorf MixMate, Thermomixer and ThermoStat plus

Sample preparation is a major component of experimental work and highly important for the modern laboratory routine. Based on the type of application and sample, preparation requires mixing and/or temperature control, storage and transport of the samples under defined conditions.

The Eppendorf Thermo/Mixer family is the ideal partner for this: versatile, highly precise and, therefore, reliable and space-saving! The various features of the respective family members offer a wide range of possible applications, customized to your individual requirements.

Together with a large selection of exchangeable thermoblocks and the IsoTherm system, you can build an ideal system for your sample preparation.

Whether mixing, heating or cooling the most varied micro test tubes or deepwell plates, microplates or PCR plates: it stays in the family!

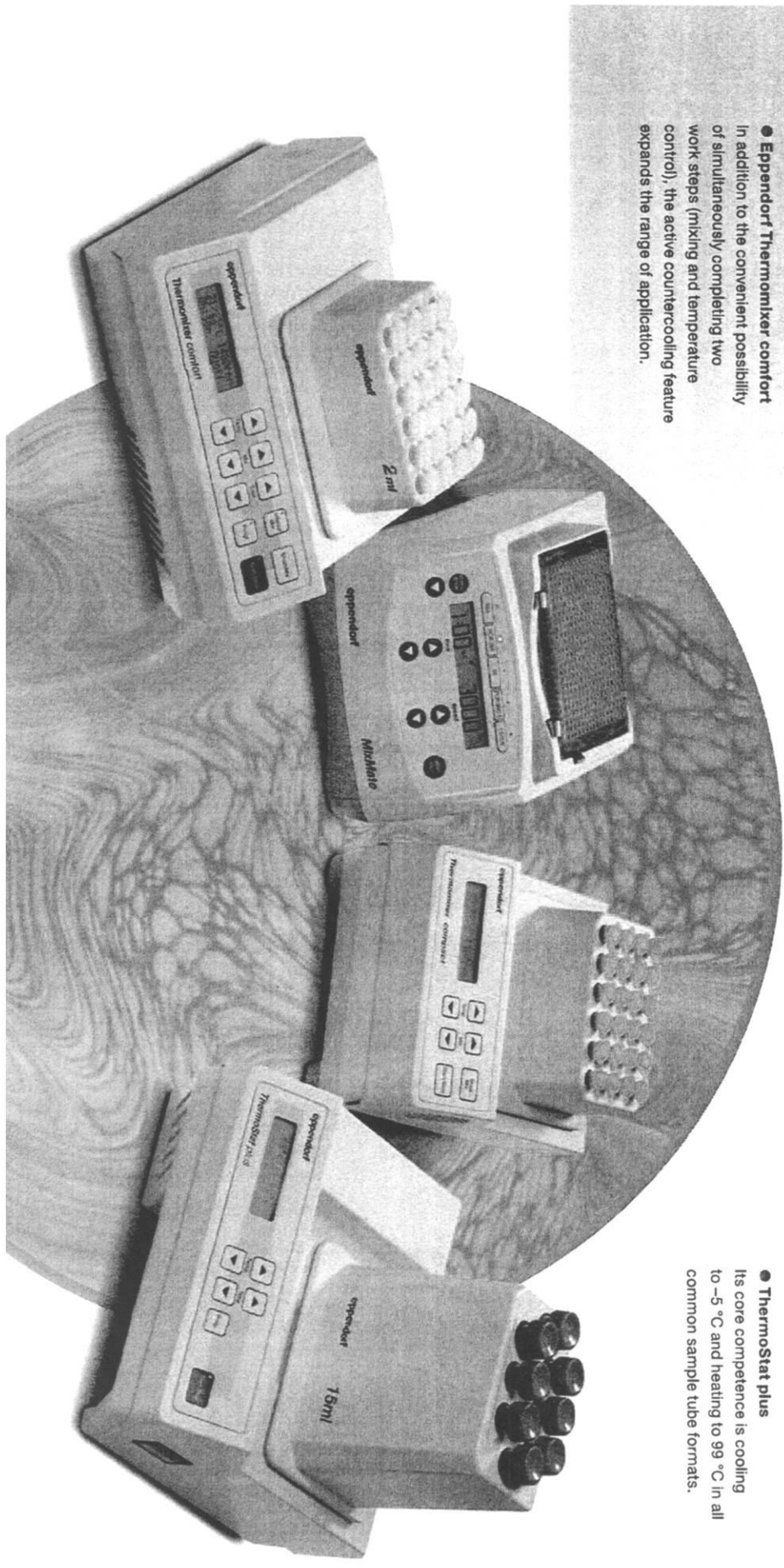


● **Eppendorf MixMate**  
 One of the most effective mixers for every type of plate format (up to 384 wells) and small volumes in micro test tubes. Plus additional vortex function.

● **Eppendorf Thermomixer compact**  
 The ideal device for heating, mixing and thermomixing in 1.5 ml micro test tubes.

● **Eppendorf Thermomixer comfort**  
 In addition to the convenient possibility of simultaneously completing two work steps (mixing and temperature control), the active countercooling feature expands the range of application.

● **ThermoStat plus**  
 Its core competence is cooling to -5 °C and heating to 99 °C in all common sample tube formats.



# Our Youngest One Gives Adult Results

## Eppendorf MixMate



The volumes are becoming smaller, the number of samples is growing, and the use of 96-well and 384-well plates is significantly increasing. With these developments, new demands are automatically placed on the equipment, especially in the field of sample preparation.

Every user in the laboratory is aware of the importance of mixing – complete and effective blending of a reaction sample is the prerequisite for a sound result. Thanks to the MixMate, you will no longer doubt the reliability and reproducibility of your results!

### Applications

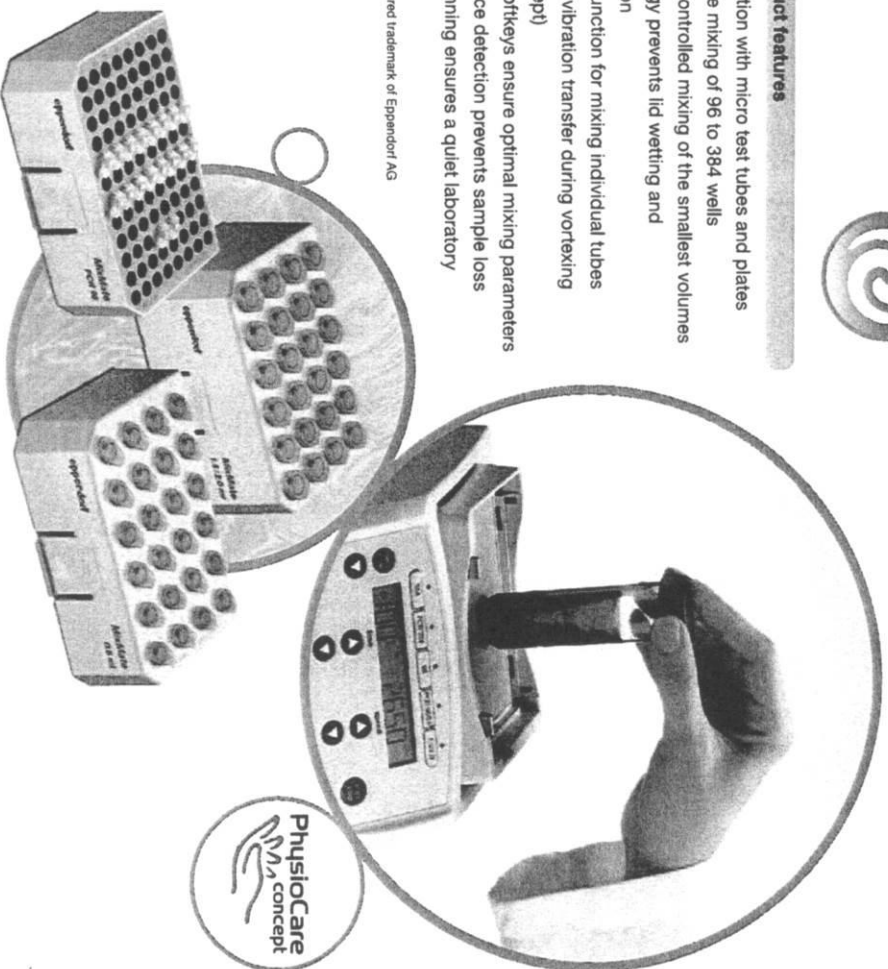
- Resuspending pellets (bacteria, DNA, cell cultures)
- Blending viscous liquids and suspensions (incl. beads)
- Mixing restriction preparations, calorimetric assays and PCR preparations
- Immunoassays
- Solubility tests
- Vortexing various tube formats

More information available at  
[www.eppendorf.com/mixmate](http://www.eppendorf.com/mixmate)

### Advantages/Product features

- Flexible tube selection with micro test tubes and plates
- Most effective plate mixing of 96 to 384 wells
- Mix-Control for controlled mixing of the smallest volumes
- Anti-spill technology prevents lid wetting and cross contamination
- Integrated vortex function for mixing individual tubes
- Minimal hand-arm vibration transfer during vortexing (PhysioCare Concept)
- Preprogrammed softkeys ensure optimal mixing parameters
- Automatic imbalance detection prevents sample loss
- Extremely quiet running ensures a quiet laboratory

PhysioCare Concept is a registered trademark of Eppendorf AG



### Ordering information

#### Description

- MixMate®**, incl. 3 tube holders: PCR 96, 0.5 ml, 1.5/2.0 ml  
**Tube holder PCR 96**, for 96 x 0.2 ml PCR tubes, PCR strips or 96-well PCR plates, semi-skirted or unskirted  
**Tube holder 0.5 ml**, for 24 x 0.5 ml micro test tubes  
**Tube holder 1.5/2.0 ml**, for 24 x 1.5 ml or 2.0 ml micro test tubes

#### International

- 5353 000.014  
5353 040.113  
5353 040.121  
5353 040.130

● **Automatic imbalance detection**  
The plates are prevented from jumping out in critical mixing situations

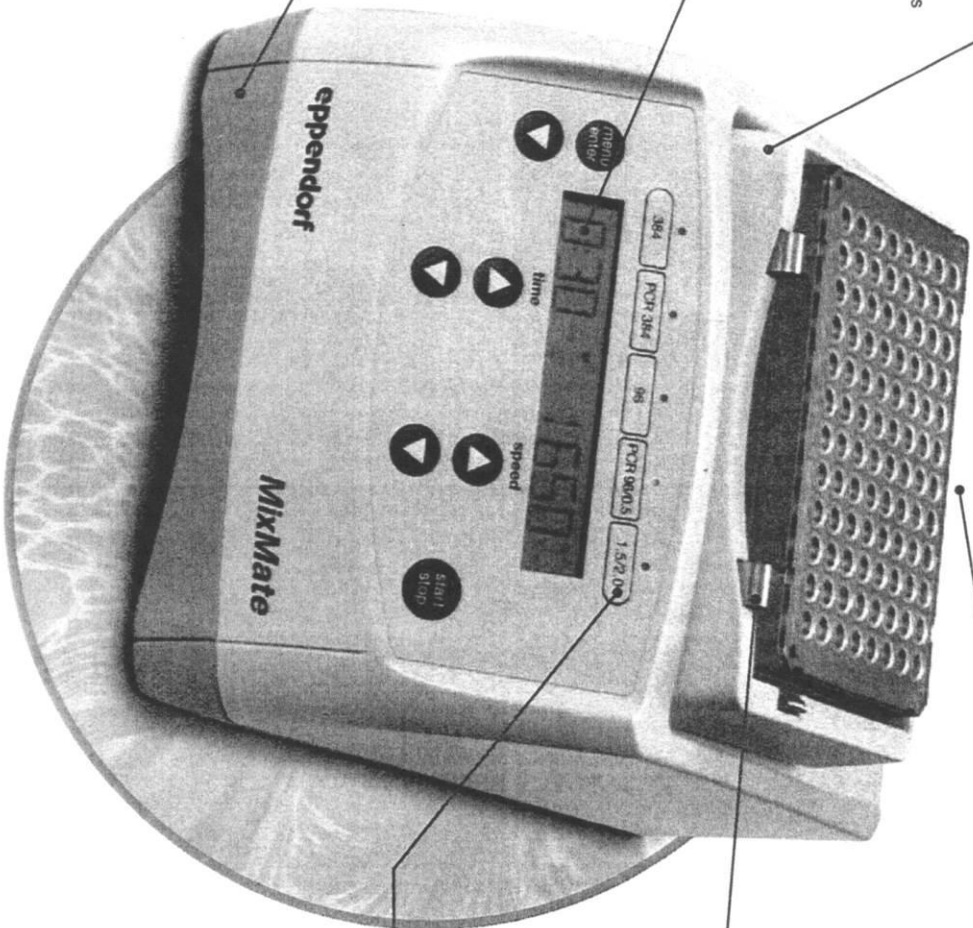
● **Digital display**  
Clear display for exact setting and reading of mixing time and mixing speed

● **High stability**  
Absolutely secure upright position with the smallest footprint – no vibration even at maximum mixing frequency

● **Touch vortex**  
For mixing individual tubes with intelligent 2 s over run for ergonomic operation (see figure at left)

● **Universal holder**  
Stainless steel springs for the secure housing of all plate formats (PCR, MTP, and deepwell plates) and micro test tube holder (0.2 ml, 0.5 ml, 1.5/2 ml)

● **Preprogrammed softkeys**  
– Individually matched mixing frequency for every tube type  
– Ensures complete mixing without lid wetting or splitters



**Technical specifications**

**Power connection** 230 V, 50–60 Hz  
**Power consumption** 40 W  
**Dimensions (W x D x H)** 17 x 23 x 13 cm  
**Weight** 4.2 kg  
**Noise level** < 50 dB(A)

**Mixing frequency**

**Touch vortex frequency**

**Adjustable mixing time**

**Mixing and vortexing radius**

Technical specifications subject to change.

300 to 3,000 rpm (in 50 rpm increments)

3,500 rpm

15 s to 99.5 h, continuous

1.5 mm (3 mm mixing stroke)

# The Family Classic

## Eppendorf Thermomixer compact



The 1.5 ml micro test tube is the most widely used lab tube world-wide! The Thermomixer compact lives up to this: with a securely installed thermoblock, a temperature control range of 4 °C above room temperature to max. 99 °C and a setting range of 1 °C to 99 °C, the most common applications can be carried out without difficulty. One can individually select from the mixing function, temperature control or thermomixing. The space-saving footprint is ideal for providing each employee with his/her own Thermomixer. The perfect thermal insulation protects users from direct contact with heated surfaces and even saves energy.

### Applications

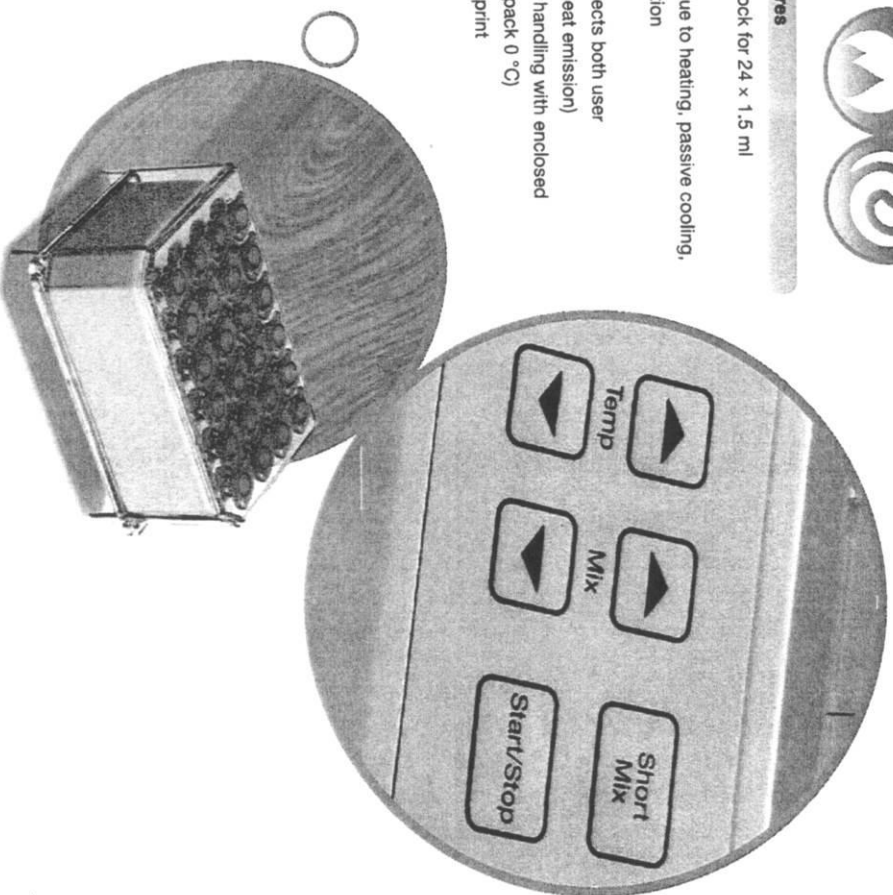
- Plasmid purification
- Enzyme reactions (DNA restriction digestion, proteinase K digestion)
- Transformation of bacterial strains and plasmids
- Denaturation of DNA, RNA, proteins
- Bacterial culture
- Resuspending pellets (bacteria, DNA, cell cultures)
- Calorimetric assays

More information available at

[www.eppendorf.com/thermomixer-compact](http://www.eppendorf.com/thermomixer-compact)

### Advantages/Product features

- Securely installed thermoblock for 24 x 1.5 ml micro test tubes
- Wide range of application due to heating, passive cooling, with or without mixing function
- Low-noise operation
- Best thermal insulation protects both user and environment (minimal heat emission)
- Simple sample cooling and handling with enclosed IsoRack and IsoPack (cool pack 0 °C)
- Space-saving via small footprint



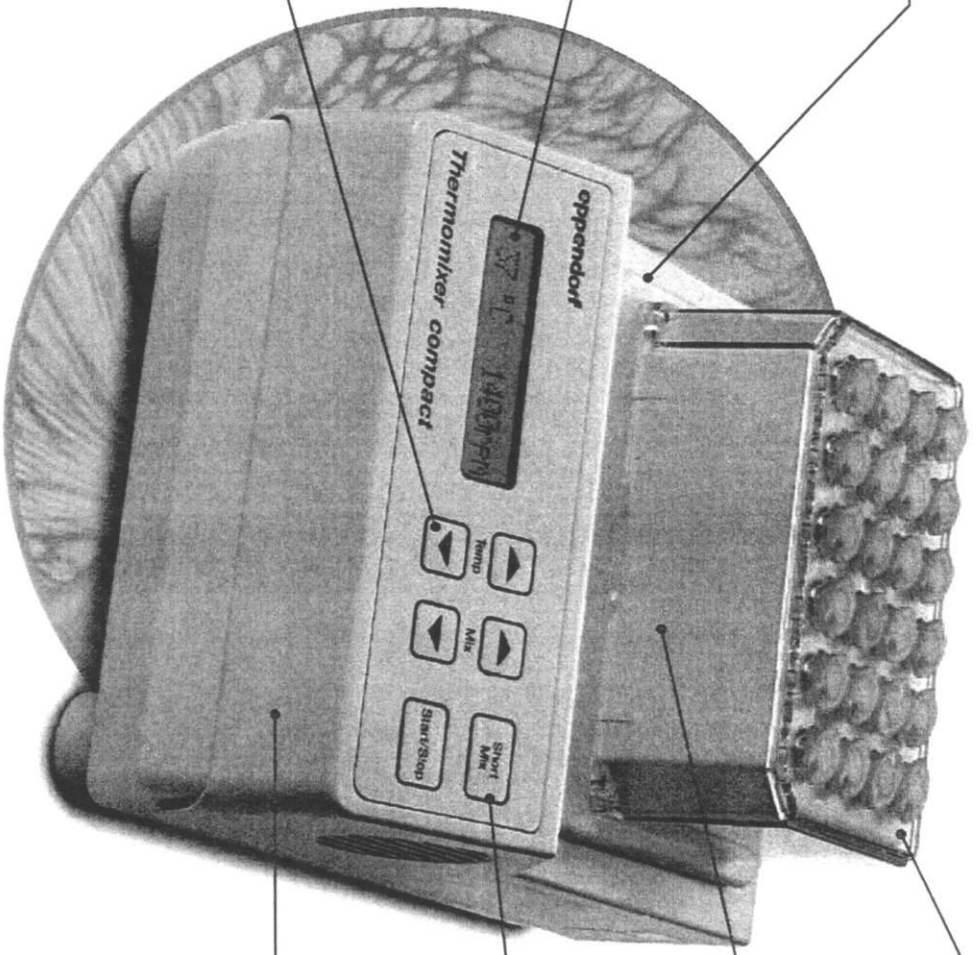
### Ordering Information

#### Description

**Thermomixer® compact**  
complete with thermoblock 1.5 ml, 1 IsoTherm Rack and 1 IsoTherm cool pack 0 °C

**International**

5350 000.013



● **Temperature range**  
 – Temperature control of the device ranges from 4 °C above room temperature to 99 °C  
 – Temperature setting range: from 1 °C to 99 °C

● **Digital display**  
 Clear display enables the exact setting and reading of mixing speed and temperature control time

● **Simplest operation**  
 Parameter keys enable a fast setting of the desired mixing and temperature parameters

● **IsoRack**  
 Enables the simultaneous handling of 24 micro test tubes

● **Exchangeable thermoblock for 1.5 ml micro test tubes**  
 Best heat transfer and homogeneous heat distribution across all micro test tubes

● **ShortMix**  
 Brief, uncomplicated mixing of sample material at the push of a button

● **Robust and space-saving housing design**  
 Chemical-resistant plastic housing facilitates the uncomplicated handling of the device

**Technical specifications**

**Power connection** 100-240 V, 50-60 Hz

**Power consumption** 90 W

**Dimensions (W x D x H)** 16,5 x 24 x 14,5 cm

**Weight** 2,4 kg

**Mixing frequency** 300-1,400 1/min

**Temperature control range** From approx. 4 °C above RT to 99 °C

**Lowest setpoint** +1 °C

Technical specifications subject to change.

# A Real Go-Getter

## Eppendorf Thermomixer comfort



Incubator, mixer and thermomixer, all in one! The Thermomixer comfort offers a variety of possibilities in the microliter range. It also features the convenient possibility of completing two work steps at once: the simultaneous mixing and temperature control of your sample material. An assortment of 10 thermoblocks, which can be easily and quickly exchanged, offer individual customizations to your laboratory requirements. Furthermore, the Thermomixer comfort is characterized by a high degree of user friendliness, with two freely selectable program runs with temperature control, mixing, and rest phases and subsequent cooling (to 13 °C below room temperature).

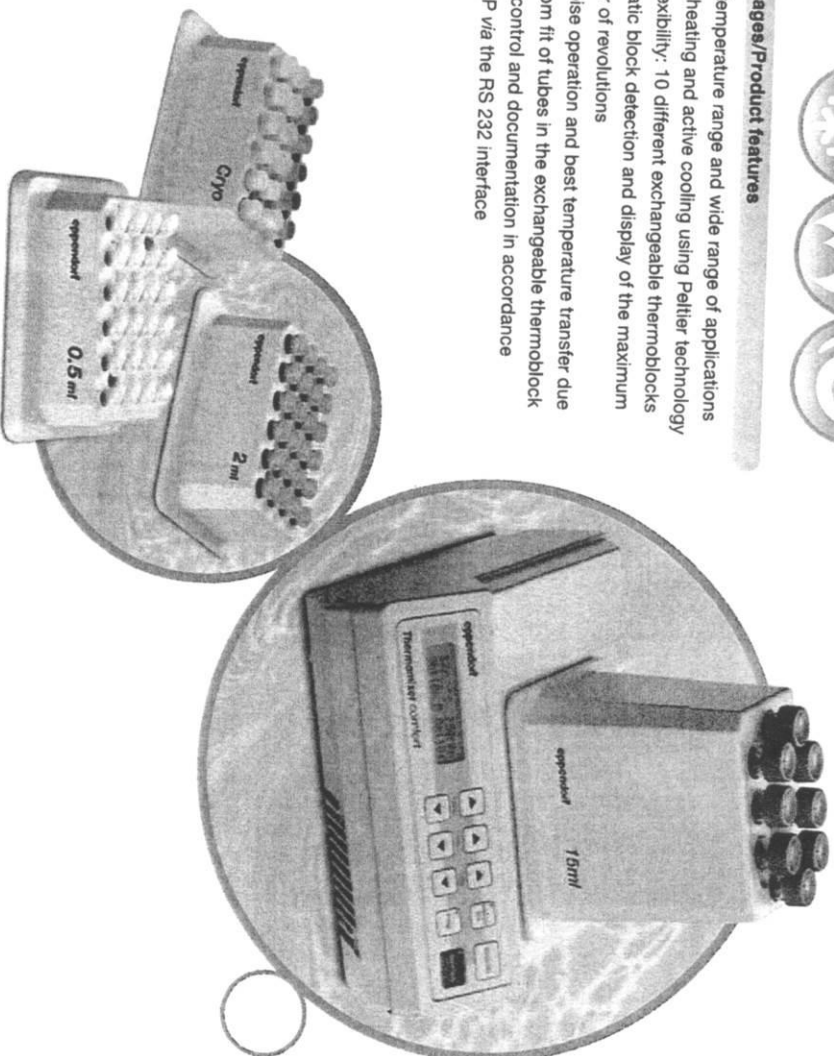
### Applications

- Plasmid purification
- Enzyme reactions (e.g., DNA restriction digestion, proteinase K digestion)
- Transformation of bacterial strains and plasmids
- Denaturation of DNA, RNA, proteins
- Bacterial culture
- Resuspending pellets (bacteria, DNA, cell culture)
- calorimetric assays
- Immunoprecipitation
- Hybridization of microarrays
- *In situ* hybridization

More information available at  
[www.eppendorf.com/thermomixer-comfort](http://www.eppendorf.com/thermomixer-comfort)

### Advantages/Product features

- Large temperature range and wide range of applications due to heating and active cooling using Peltier technology
- High flexibility: 10 different exchangeable thermoblocks
- Automatic block detection and display of the maximum number of revolutions
- Low-noise operation and best temperature transfer due to custom fit of tubes in the exchangeable thermoblock
- Device control and documentation in accordance with GLP via the RS 232 interface



### Ordering information

#### Description

Thermomixer® comfort basic unit without exchangeable thermoblock\*

\* For accessories, see reverse.

International  
5355 000.011



● **IsoRack**  
Up to 24 micro test tubes (0.5 ml, 1.5/2.0 ml) can be simultaneously placed on an exchangeable thermoblock (see page 13)

● **Large temperature range**  
- Samples can be heated to 99 °C and cooled to 13 °C below room temperature  
- Adjustable from 1 °C-99 °C

● **Digital display**  
Clear display enables the exact setting and reading of mixing speed and temperature control time

● **Intuitive operation**  
Parameter keys enable simple setting of the desired mixing and temperature parameters

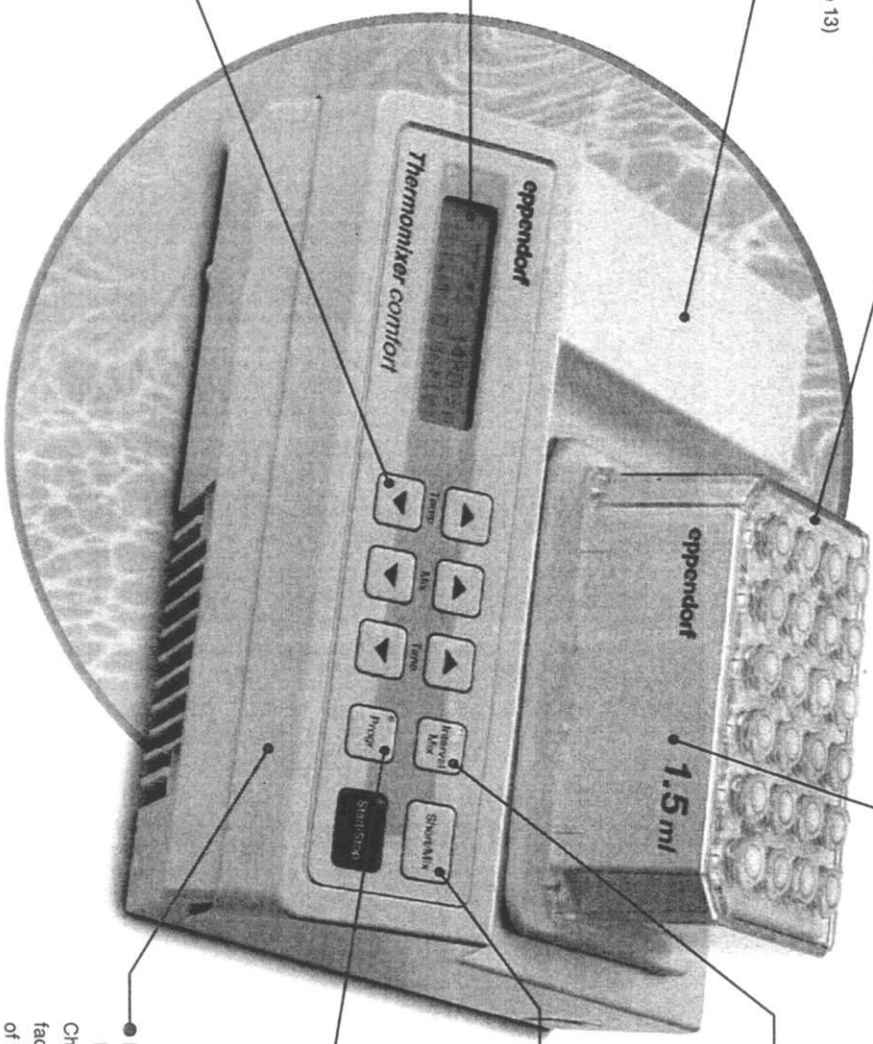
● **10 exchangeable thermoblocks**  
For flexible use of all common lab tubes (see page 12)

● **Interval Mix**  
Continuous switching between mixing and rest phase, with freely selectable mixing frequency and duration

● **ShortMix**  
Enables brief, uncomplicated mixing of sample material

● **Program mode**  
Two consecutive, freely programmable mixing/temperature control runs

● **Robust and space-saving housing design**  
Chemical-resistant plastic housing facilitates the uncomplicated handling of the device



**Technical specifications**

**Power connection** 100-240 V, 50-60 Hz  
**Power consumption** 90 W  
**Dimensions (W x D x H)** 22 x 25 x 12.5 cm (H without block)  
**Weight** 3.2 kg

**Temperature control range**

**Lowest setpoint**

**Mixing frequency**

Technical specifications subject to change.

From approx. 13 °C below RT to 99 °C  
 +1 °C  
 300-1,500 1/min

# The Temperature Expert

## Eppendorf ThermoStat plus

Ice cold, cold, cool, warm, warmer: here, precise temperature control is the main ideal! As a compact table thermostat, the ThermoStat plus ideally complements the family of Eppendorf thermomixers. Its particular strength lies in the extensive temperature range. It can heat samples to 99 °C and cool them ice cold to -30 °C below ambient temperature. 11 different exchangeable thermoblocks are available thus ensuring a high degree of flexibility in the selection of the lab tubes.

### Applikationen

- Ligation of cDNA and plasmid vector
- Nucleic acid restriction digestion
- cDNA – synthesis
- Proteinase K – digestion
- Transformation of bacterial strains with plasmids
- Denaturation of nucleic acids and proteins
- Microarrays
- *In situ* hybridization
- Immunohistochemistry

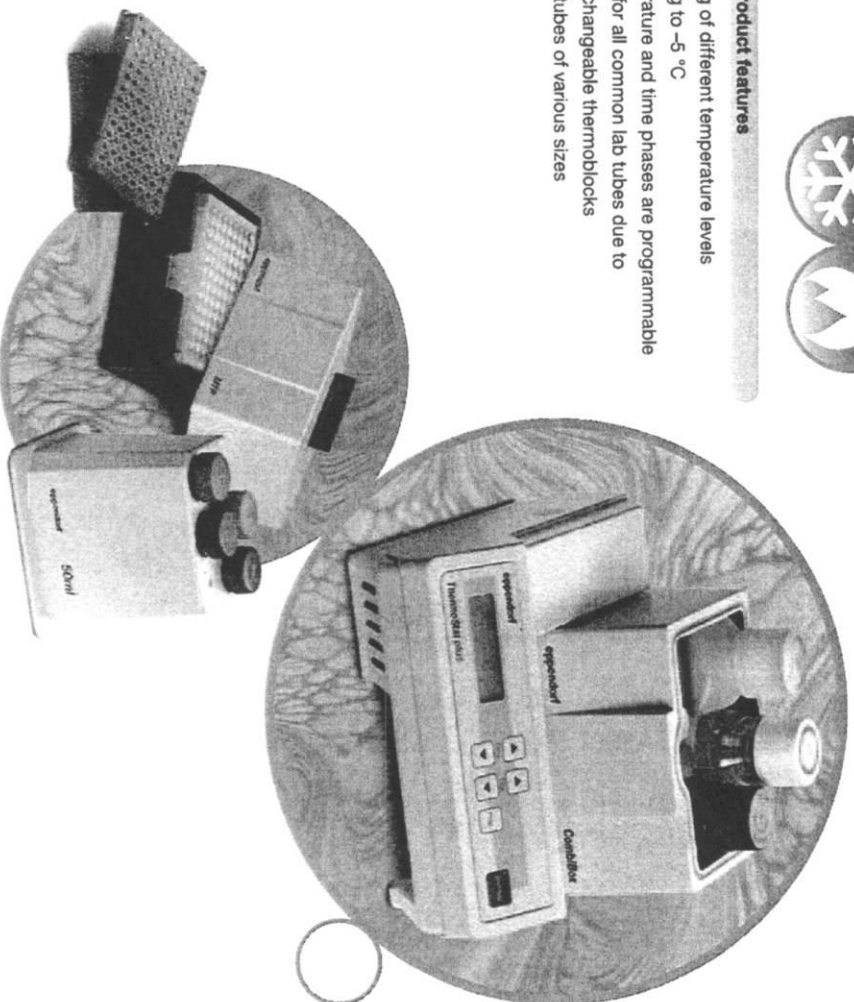
More information available at

[www.eppendorf.com/thermostat-plus](http://www.eppendorf.com/thermostat-plus)



### Advantages/Product features

- Precise holding of different temperature levels
- Sample cooling to -5 °C
- Up to 4 temperature and time phases are programmable
- High flexibility for all common lab tubes due to 11 different exchangeable thermoblocks
- CombiBox for tubes of various sizes



### Ordering information

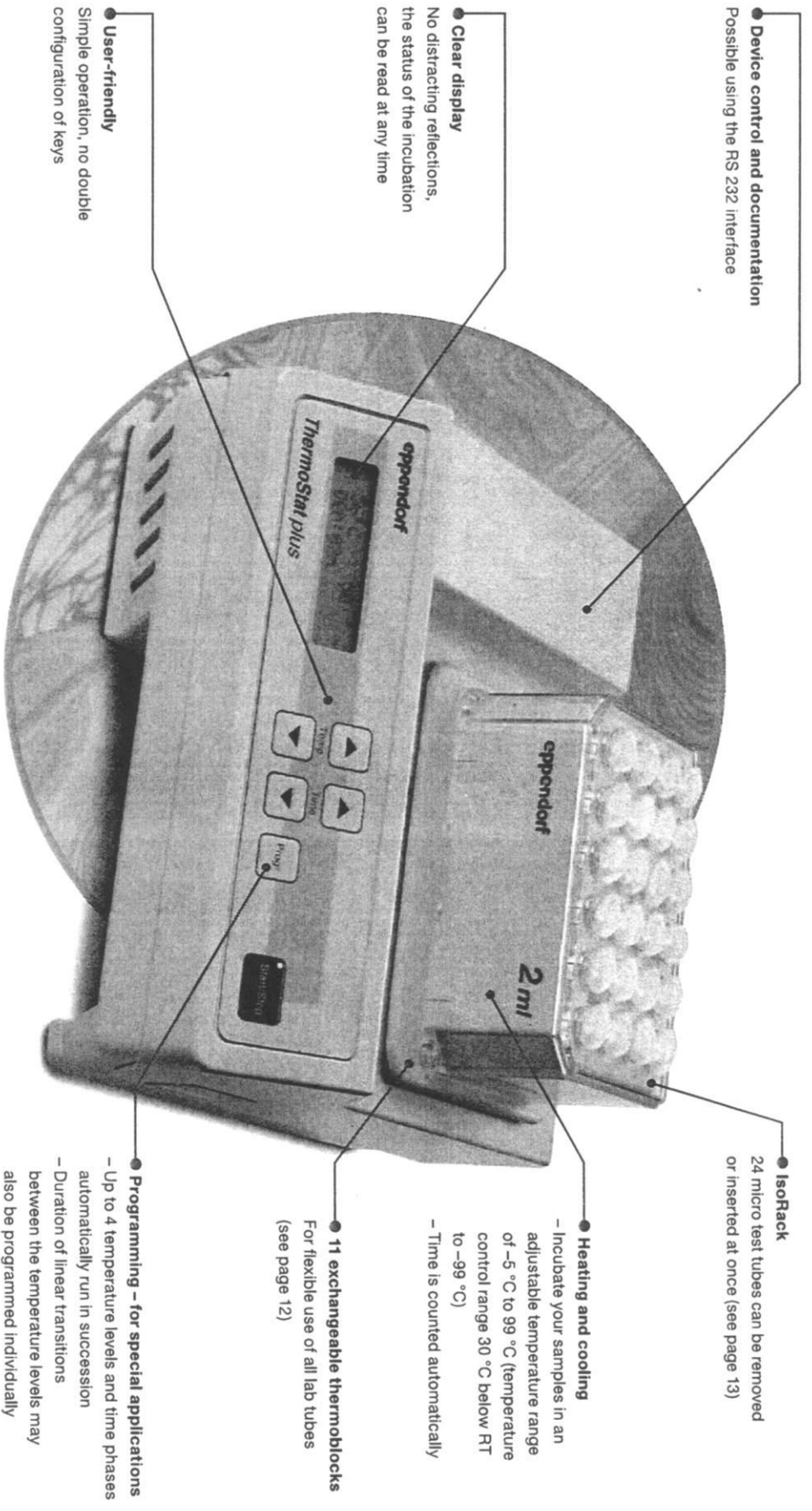
#### Description

ThermoStat plus™ basic unit without exchangeable thermoblock\*

\* For accessories, see reverse.

International

5352 000.010



● **Device control and documentation**  
Possible using the RS 232 interface

● **Clear display**  
No distracting reflections,  
the status of the incubation  
can be read at any time

● **User-friendly**  
Simple operation, no double  
configuration of keys

● **IsoRack**  
24 micro test tubes can be removed  
or inserted at once (see page 13)

● **Heating and cooling**  
- Incubate your samples in an  
adjustable temperature range  
of -5 °C to 99 °C (temperature  
control range 30 °C below RT  
to -99 °C)  
- Time is counted automatically

● **11 exchangeable thermoblocks**  
For flexible use of all lab tubes  
(see page 12)

● **Programming - for special applications**  
- Up to 4 temperature levels and time phases  
automatically run in succession  
- Duration of linear transitions  
between the temperature levels may  
also be programmed individually

**Technical specifications**  
**Power connection**  
**Dimensions (W x D x H)**  
**Weight**

100-240 V, 50-60 Hz  
22 x 25 x 12.5 cm (H without block)  
5 kg

**Temperature control range**  
**Lowest setpoint**  
Technical specifications subject to change.

30 °C below RT to 99 °C  
-5 °C

# The Program for the Whole Family

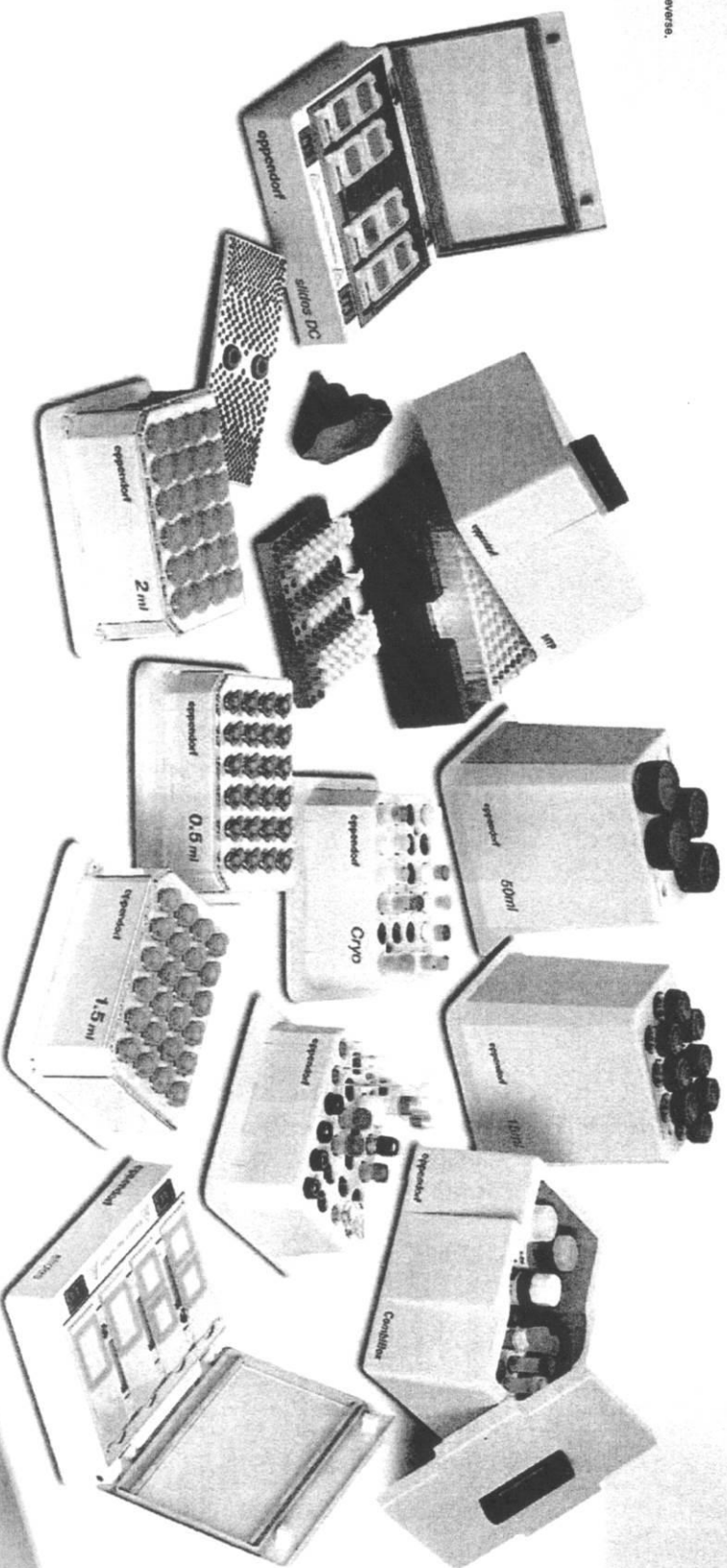
## Exchangeable thermoblocks: Thermomixer comfort / ThermoStat plus

Today, micro test tubes in different sizes, tomorrow Falcon tubes\*, and in the meantime, various MTPs ... a different instrument every time? Unnecessary! The extensive exchangeable thermoblock assortment for the Eppendorf Thermomixer comfort and ThermoStat plus enables the convenient temperature control and mixing of all standard lab tubes. Unique heat transfer is achieved due to the exact tube adaption in the blocks.

### Advantages/Product features

- Modern heat insulation facilitates safe operation and reduces energy loss
- Best heat transfer due to complete enclosure of the tube
- Due to dry incubation, improved laboratory hygiene and reduced danger of contamination are achieved
- Fast and simple replacement of the blocks
- Exchangeable thermoblocks for all common lab tubes
- Exchangeable thermoblocks for micro test tubes are compatible with IsoTherm System

Ordering information on reverse.



# These Members Complete the Family

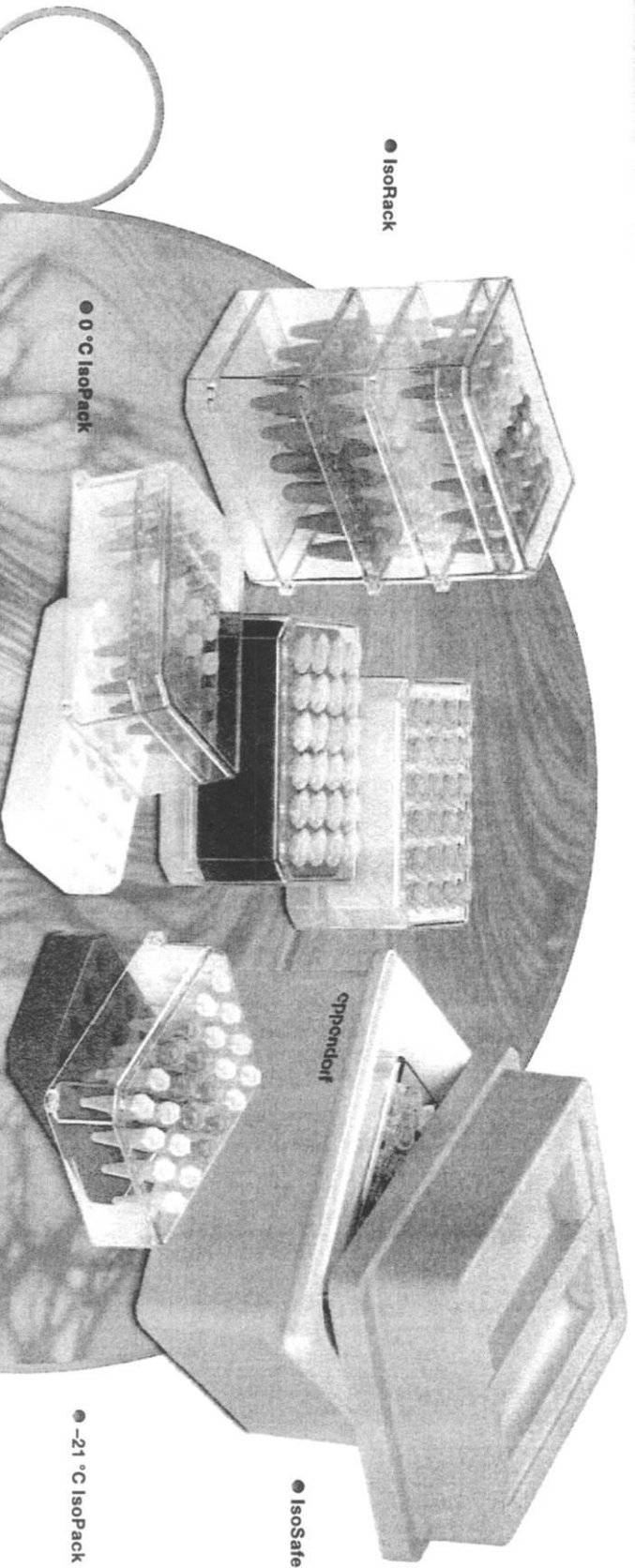
## The IsoTherm System

A larger number of samples must be simultaneously centrifuged and subsequently resuspended, incubated or re-analyzed. Practical: The IsoTherm System avoids the time-consuming transfer of individual micro test tubes! All of the samples can be conveniently processed and transferred, safely transported and stored in a space-saving manner. Cooled or frozen samples are cooled effectively and continuously for many hours at  $-21^{\circ}\text{C}$  or  $0^{\circ}\text{C}$ . Of course, the IsoRacks are compatible with the thermoblocks and tube holders for micro test tubes and can be centrifuged in the MTP rotor.

Ordering information on reverse.

### Advantages/Product features

- **IsoRacks**
  - Simple handling of many samples simultaneously
  - Stackable and lockable for secure storage or transport of many samples
  - Autoclavable
  - Can be centrifuged in the MTP rotor
  - Buoyant in the water bath
- **IsoSafe**
  - Supports cooling inside the IsoPack for hours
  - No frost formation with closed lid
  - Space-saving
- **IsoPacks**
  - Dry and space-saving cooling method
  - No melting ice baths
  - Reduced risk of sample contamination
  - Perfect for sample cooling, storage and transport



● IsoRack

● 0 °C IsoPack

sppondof

● IsoSafe

● -21 °C IsoPack

Ordering information for exchangeable thermoblocks

Description	International
<b>Exchangeable thermoblocks for micro test tubes,</b> complete with IsoTherm Rack and IsoTherm cool pack 0 °C for 24 x 0,5 ml 24 x 1,5 ml 24 x 2,0 ml	5361 000.015 5360 000.011 5362 000.019
<b>Exchangeable thermoblock for MTPs and deepwell plates, with lid</b>	5363 000.012
<b>Adapter plate for 96 x 0,2 ml PCR tubes and PCR plates,</b> for application in the exchangeable thermoblock for MTPs	5363 007.009
<b>Exchangeable thermoblock for Falcon® tubes for</b> 8 x 15 ml 4 x 50 ml	5366 000.013 5365 000.010
<b>Exchangeable thermoblock for 24 tubes, Ø 11–11,9 mm, height 30–76 mm</b>	5364 000.016
<b>Exchangeable thermoblock for 1,5–2 ml Cryo tubes,</b> for 24 tubes, outside diameter max. 12,5 mm; all bottom shapes	5367 000.017
<b>Exchangeable thermoblock for 4 slides, for hybridization experiments</b>	5368 000.010
<b>Exchangeable thermoblock for slides DC,</b> for 4 Eppendorf DualChip microarrays – assortment on request	5368 000.100
<b>Exchangeable thermoblock CombiBox for any tubes</b> (except for ThermoStat plus) shelving space 13,5 x 9,0 x 6,0 cm (W x D x H)	5352 100.007

Ordering information for IsoTherm

Description	International
<b>IsoTherm System® starter set</b> (IsoSafe, IsoRack, 0 °C IsoPack and IsoPack), for 0,5 ml tubes 1,5/2,0 ml tubes	3880 000.011 3880 001.018
<b>IsoPack and IsoRack set</b> (1 IsoPack and 1 IsoRack), for 0,5 ml tubes, 0 °C 0,5 ml tubes, –21 °C 1,5/2,0 ml tubes, 0 °C 1,5/2,0 ml tubes, –21 °C	3880 000.160 3880 000.178 3880 001.166 3880 001.174
<b>IsoRack</b> (set of 4 racks), for 0,5 ml tubes 1,5/2,0 ml tubes	3880 000.038 3880 001.034
<b>IsoSafe and IsoPack</b> (1 IsoSafe and set of 3 IsoPack), for 0,5 ml tubes, 0 °C 0,5 ml tubes, –21 °C 1,5/2,0 ml tubes, 0 °C 1,5/2,0 ml tubes, –21 °C	3880 000.020 3880 000.046 3880 001.026 3880 001.042

Technical specifications for exchangeable thermoblocks

Exchangeable thermoblock for	Max. Temp	Max. rpm
<b>24 micro test tubes 0,5 ml</b>	99 °C	1,500
<b>24 micro test tubes 1,5 ml</b>	99 °C	1,400
<b>24 micro test tubes 2,0 ml</b>	99 °C	1,400
<b>PCR and deepwell plates, MTPs</b>	99 °C	1,400*
<b>Tubes at Ø 11–11,9 mm, height 30 – 76 mm</b>	99 °C	1,400
<b>8 Falcon® tubes 15 ml</b>	99 °C	750
<b>4 Falcon® tubes 50 ml</b>	99 °C	750
<b>1,5–2 ml Cryo tubes</b>	99 °C	1,400
<b>4 slides or 4 DualChip microarrays</b>	70 °C	1,400
<b>CombiBox (only ThermoStat plus)</b>	95 °C	0

\* With a payload of, e.g., 200 g, the max. rpm is 800.

# eppendorf

In touch with life

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