eppendorf



Protect Your Samples – And the Planet

Centrifuge 5427 R with hydrocarbon cooling

The Future is Green

Global warming and its consequences are one of the greatest challenges of our time. Hydrofluorocarbons, which have been used as refrigerants in cooling systems such as air-conditioners, as well as laboratory centrifuges or freezers, can contribute to global warming due to their chemical structure.

To protect our planet for future generations, it is important to switch to much more environmentally friendly, »green« cooling agents – hydrocarbons. These natural coolants have a Global Warming Potential similar to CO₂. To support this matter in the laboratory environment, Eppendorf now offers Centrifuge 5427 R with hydrocarbon cooling – the first centrifuge in our portfolio with a natural refrigerant – to protect your samples, and the planet.





See Centrifuge 5427 R virtually on your lab bench – via the Augmented Reality function in our Eppendorf App!



Download the Eppendorf App here:





Centrifuge Profile

Centrifuge 5427 R does not only support you on your way to a greener lab. It is the perfect solution for labs with a multiplicity of different molecular biology applications or in need of high-throughput solutions for 1.5–2 mL tubes – all combined in a microcentrifuge with the highest throughput/ footprint-ratio within the Eppendorf microcentrifuge range.

Natural refrigerant R290 (Propane) keeps your samples cool and also the planet. Learn more in Whitepaper 087 (More than just spinning – ACT Sustainability Label for Eppendorf Benchtop Centrifuges)

Higher sample throughput

with the 48-place dual row rotor to reduce the daily run time significantly

Improved operation

with the new end-of-run timer, incubation function and a more precise time controlling for very short runs

Ease-of-use

the new, brightly lit, easy to read display and the OptiBowl® design for low noise levels guarantees a relaxed work environment Learn more about our sustainability solutions: www.eppendorf.com/sustainability





High versatility

with 9 different rotor options that cover a wide range of molecular biology applications from 0.2–5 mL tubes and 8-place PCR strips

Lower your energy consumption

with the adjustable ECO-shut off function, that switches the compressor off after 1, 2, 4 or 8 hours of non-use, to save energy and elongate the compressor lifetime

* The Centrifuge 5427 R is a non-automatic centrifuge for the separation of liquid substance mixtures from the human body and is specifically intended to be used as an accessory together with an in vitro diagnostic device and to enable its use according to its intended purpose. This product complies with the requirements of the EU In Vitro Diagnostics Regulation (IVDR) 2017/746. Eppendorf centrifuges are exclusively intended for indoor use by trained specialists.

One Centrifuge – Multiple Applications

High-throughput separation of a broad range of samples like DNA/RNA and proteins in 1.5/2.0 mL tubes

Aerosol-tight option: For safe centrifugation of hazardous samples Max. capacity: $48 \times 1.5/2.0$ mL tubes Max. speed: $18,210 \times g$ (12,700 rpm)

High-speed separation of a broad range of samples like DNA/RNA and proteins in 1.5/2.0 mL tubes

Aerosol-tight: For safe centrifugation of hazardous samples

Max. capacity: $24 \times 1.5/2.0$ mL tubes **Max. speed:** $25,001 \times g$ (16,220 rpm)

Rotor FA-45-48-11/ Rotor F-45-48-11



Rotor FA-45-24-11





Rotor S-24-11-AT



Rotor FA-45-48-5-PCR

Separation of a broad range of samples like DNA/RNA and proteins in 1.5/2.0 mL tubes

Aerosol-tight option: For safe centrifugation of hazardous samples **Max. capacity:** $30 \times 1.5/2.0$ mL tubes **Max. speed:** $20,800 \times g$ (14,000 rpm)

Separation of DNA/RNA and proteins in 1.5/2.0 mL tubes via liquid-liquid extraction (e.g. TRIzol®)

Aerosol-tight: For safe centrifugation of hazardous samples

Max. capacity: $24 \times 1.5/2.0$ mL tubes **Max. speed:** $16,049 \times g$ (12,700 rpm)

Micro-volume protocols, such as PCR/qPCR reaction set-up in 0.2 mL tubes and strips

Max. capacity: 48×0.2 mL PCR tubes or $6 \times$ PCR strips with 0.2 mL **Max. speed:** $11,710 \times g$ (10,500 rpm)



Innovative: Designed with an extra high rim to support open tube lids during centrifugation

Aerosol-tight: For safe centrifugation of hazardous samples

Max. capacity: $24 \times 1.5/2.0$ mL tubes **Max. speed:** $19,100 \times g$ (13,200 rpm)



Rotor FA-45-24-11-Kit



Rotor FA-45-12-17

Harvesting bacteria and yeast with up to 5 mL sample volume

Versatile: Accommodates adapters to hold 1.5/2 mL, HLPC, and cryo tubes **Aerosol-tight:** For safe centrifugation of hazardous samples

Max. capacity: $12 \times \text{Eppendorf Tubes}^{\otimes} 5.0 \text{ mL}$ Max. speed: $20,600 \times g \text{ (14,000 rpm)}$



Ordering information

Description	Order no.
Centrifuge 5427 R, refrigerated, without rotor, rotary knobs	*1
Centrifuge 5427 R, refrigerated, with Rotor FA-45-30-11, rotary knobs	*1
Centrifuge 5427 R, refrigerated, with Rotor FA-45-48-11, rotary knobs	*1
Rotors	
Rotor FA-45-48-11, aerosol-tight, incl. rotor lid, for 48 x Eppendorf Tubes® 1.5/2 mL	5409 710 001
Rotor F-45-48-11, incl. rotor lid, for 48 x Eppendorf Tubes® 1.5/2 mL	5409 712 004
Rotor FA-45-30-11, aerosol-tight, incl. rotor lid, for 30 x Eppendorf Tubes® 1.5/2 mL	
Rotor F-45-30-11, incl. rotor lid, for 30 x Eppendorf Tubes® 1.5/2 mL	
Rotor FA-45-24-11, aerosol-tight, incl. rotor lid, for 24 x Eppendorf Tubes® 1.5/2 mL	
Rotor FA-45-24-11-Kit, aerosol-tight, incl. rotor lid, for 24 x Spin Column tubes 1.5/2 mL	5409 704 001
Rotor S-24-11-AT, aerosol-tight, incl. wind shield and rotor lid, for 24 x Eppendorf Tubes® 1.5/2 mL	5409 715 003
Rotor F-45-48-5-PCR, for 48 x 0.2 mL PCR tubes or 6 x PCR strips with 0.2 mL	5409 714 007
Rotor FA-45-12-17, aerosol-tight, incl. rotor lid, for 12 × Eppendorf Tubes® 5.0 mL	5409 700 006

Technical specifications

recinical specifications	
Model	Centrifuge 5427 R
Dimensions (W \times D \times H)	31.9 × 54 × 25.4 cm / 12.6 × 21.3 × 10.2 in
Weight w/o rotor	30 kg / 66.14 lb
Noise level	55 dB(A) with rotor FA-48-45-11
Run time settings	5 s to 9 h 59 min, infinite
Max. speed (rcf)	25,001 × g
Max. rpm	16,220 rpm
Temperature range	−11 °C to 40 °C
Rotor options	9
Refrigerant	R290 (Propane)
Max. power consumption	495 W
Software Functions	End-of-run timer, One-push Short Spin button, rpm/rcf calculation
Brake options	On/Soft
Connectivity	VisioNize® Box enabled
Energy Saving Options	Adjustable ECO-Shut off function, Standby function

Technical specifications are subject to change. Errors and omissions excepted.

*1 For ordering information, please check our local website or contact your local sales representative. www.eppendorf.com/Centrifuge-5427R



This centrifuge is ACT certified! Learn more: https://act.mygreenlab.org/





Your local distributor: www.eppendorf.com/contact Eppendorf SE \cdot Barkhausenweg 1 \cdot 22339 Hamburg \cdot Germany eppendorf@eppendorf.com \cdot www.eppendorf.com

www.eppendorf.com/sustainable-centrifuge