Instructions for use
Aerosol-tight centrifugation
English (EN)

This document supplements the operation manual for the centrifuge and does not replace it. Therefore, please also read the operating manual before starting up the rotors for the first time. You can find the current version on the Internet at www.eppendorf.com.

The aerosol tightness of rotors, rotor lids, buckets and caps has been tested and certified by the "Centre of Emergency Preparedness and Response, Health Protection Agency, Porton Down (UK)" in accordance with Annex AA of IEC 1010-2-020/IEC 61010-2-020. The certificates are included with the corresponding operating manuals.

1 Safety notes and application limits

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

- When handling infectious liquids and pathogenic germs, observe the national regulations, the biosafety level of your laboratory, the material safety data sheets, and the manufacturer's application notes.
- Use aerosol-tight sealing systems for the centrifugation of these substances.
- When working with pathogenic germs which belong to a higher risk group, more than one aerosol-tight bioseal must be used.
- Wear your personal protective equipment.
- For comprehensive regulations about handling germs or biological material of risk group II or higher, please refer to the "Laboratory Biosafety Manual" (source: World Health Organization, Laboratory Biosafety Manual, the current edition).

WARNING! Risk of contamination and infection due to escaping liquids
Sample liquids may escape during the centrifugation of open tubes if these are filled to the maximum fill level.

- Use only closed tubes or tubes filled to a maximum of 80 % of the permissible filling volume for aerosol-tight centrifugation.
- Observe the maximum filling volume indicated by the manufacturer.
- Ensure that the tubes are closed tightly.

WARNING! Damage to health due to limited aerosol tightness in the event of incorrect use.
Mechanical stresses and contamination by chemicals or other aggressive solvents may impair the aerosol tightness of the rotors and rotor lids.Autoclaving at excessive temperatures can lead to vessels, adapters and rotor lids becoming brittle and deformed.

- Check the integrity of the seals of the aerosol-tight rotor lids or caps before each use.
- Only use aerosol-tight rotor lids or caps if the seals are undamaged and clean.
- Do not exceed temperatures of 121°C or a time of more than 20 min. while autoclaving.
- After each proper autoclaving process (121 °C, 20 min.), thinly brush the threads of the rotor lid screw with pivot grease (order no. Int. 5810 350.050, North America 022634330).
- Replace aerosol-tight rotor lids without replaceable seals after 50 autoclaving cycles.
- For QuickLock rotor lids, only the seal must be replaced after 50 autoclaving cycles.
- **Never** store aerosol-tight rotors or buckets closed.

WARNING! Risk to health due to limited aerosol tightness with incorrect rotor/rotor lid combination.
Aerosol-tight centrifugation is guaranteed only if the rotors and rotor lids intended for this purpose are used. The designation of aerosol-tight fixed-angle rotors always starts with **FA**. The aerosol-tight rotors and rotor lids of this centrifuge are additionally marked with a red ring on the rotor and a red rotor lid screw.
Aerosol-tight swing-bucket rotors are marked **AT** (aerosol-tight).

- Always use rotors and rotor lids marked aerosol-tight together for aerosol-tight centrifugation. The details specifying in which centrifuge you may use the aerosol-tight rotors and rotor lids can be found on the rotor and on the upper side of the rotor lid.
- Only use aerosol-tight rotor lids in combination with the rotors that are marked on the rotor lid.
- Only use aerosol-tight buckets with the corresponding caps.

NOTICE! Damage to rotors from aggressive chemicals.
Rotors are high-quality components which withstand extreme stresses. This stability can be impaired by aggressive chemicals.

- Avoid using aggressive chemicals such as strong and weak alkalis, strong acids, solutions with mercury ions, copper ions and other heavy metal ions, halogenated hydrocarbons, concentrated saline solutions and phenol.
- If it is contaminated by aggressive chemicals, clean the rotor and especially the rotor bores immediately using a neutral cleaning agent.
- Due to the manufacturing process, color variations may occur on PTFE coated rotors. These color variations do not affect the service life or resistance to chemicals.

2 Service life

Unless stated otherwise (in the manual of the centrifuge, indication of the number of cycles on the rotor, in the instructions for use of the rotor), all other rotors and rotor lids can be used over the entire service life of the centrifuge if the following prerequisites are met:

- proper use
- recommended maintenance
- undamaged condition

Accessories	**Max. service from the first commissioning onward**
Aerosol-tight rotor lids with exchangeable seal (e.g. QuickLock rotor lids)	3 years (replace seals every 50 autoclaving cycles)
Aerosol-tight rotor lids without exchangeable seal	3 years or after 50 autoclaving cycles, whichever occurs first
Non-aerosol-tight rotor lids	3 years
Aerosol-tight caps made of PP, PC, PEI	3 years or after 50 autoclaving cycles, whichever occurs first
Adapters	1 year

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