

1. INTRODUCTION

This mini centrifuge offers versatility, simplicity, safety, and ease of usage in a single package. This product has been designed after studying centrifuges and its usage in numerous scenarios of the lab environment.

This mini centrifuge is specially suitable for microfiltration, cell separations, centrifugal tube sedimentation, and spin down applications. Please read this manual thoroughly before operating the centrifuge.

2. INTENDED USE

This mini centrifuge is designed to separate, sediment, spin down aqueous solutions & solvent suspensions of differing densities in compatible sample containers.

NOTE: Before using the centrifuge, please read this user manual carefully. This user manual is intended to assist with the operation and care of the unit & is not a document which aids in repair. For repair please contact the supplier.

3. FEATURES

- 8 position mini centrifuge tube rotor
- Digital display with micro processor control
- Set variable speed & timer
- Electronic safety brake on lid opening for user safety
- Magnetic rotor for easy tool free changing of rotor
- Starts and stops in seconds
- Lid safety interlock
- Smooth and silent, discreet running
- Small footprint can be fit in hoods & small work places
- Interchangeable magnetic rotors (MCT rotor & PCR rotor)
- Low voltage power consuming device

4. STANDARD ACCESSORIES

1.5/2ml rotor, PCR strip rotor, Power adaptor

Individual adaptor for 0.5 ml tubes, pack of 8

Individual adaptor for 0.1/ 0.2 ml tubes, pack of 8

Product User Manual, Warranty Card and Declaration Conformity

5. TECHNICAL SPECIFICATIONS

| | |
|-------------------------------|--|
| Motor Type | BLDC Motor |
| Rotor Capacity | 8 x 1.5 /2.0 ml Tube Rotor & 2 Place PCR Strip Rotor |
| Speed | 1000 - 6000 RPM |
| | 2000 x g (MAX RCF) |
| Speed Accuracy | ± 2 % RPM |
| Run Time & Mode | 1 - 25 min & Infinite mode |
| Size (W X D X H) | 162 x 157 x 116 mm |
| Weight | 1.1 kg |
| Power Adapter Detail | Input: 100-240VAC, 50/60Hz Output: 24V $\overline{\text{---}}$ 1.5A |
| Power Consumption | 15 W |
| Permissible Relative Humidity | ≤80% |
| Ambient Temperature | 5-40°C. |

| | |
|------------------|--|
| Altitude | Use upto an altitude of 2000 m above MSL |
| Pollution Degree | 2 |
| Environment | For indoor use only |

6. SAFETY PRECAUTIONS

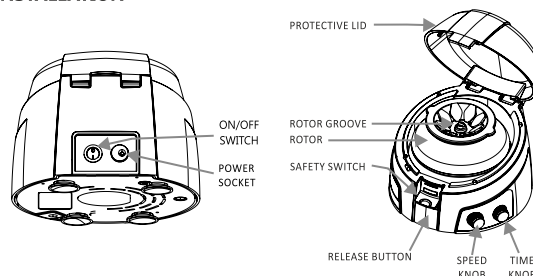


Read all safety & usage information provided in this manual carefully before using the device.

The personal mini centrifuge is designed to be safe under the following conditions when operated with necessary precautions mentioned below :

- Indoor use only. Make sure to always install the centrifuge on stable flat surfaces only & place it near the electrical outlet.
- Ambient temperature of 4°C to 45°C.
- Main supply voltage fluctuations not to exceed +/- 10% of the nominal voltage.
- Position at least 20 cm from walls, 20 cm from ceiling and 20 cm between other products.
- Make sure the rotor is placed in the shaft groove properly. If the rotor is not installed properly, the machine will make noise, turn off the machine & install the rotor as instructed for fitment of the rotor.
- Always load the rotor symmetrically. Each tube should be counterbalanced by another tube.
- Make sure to always use only specified mini centrifuge tubes made from plastic and designed to withstand centrifugal forces of at least 2000 g.
- Do not operate the centrifuge without the rotor being properly attached to the shaft. Re-check by trying to pull it up manually, especially after the rotor has been changed or re-assembled.
- Do not move the centrifuge while it's under operation.
- Do not fill the tubes while they are in the rotor. Liquid spillage may harm the unit.
- Do not put hands in the rotor chamber unless the rotor has completely stopped.
- Do not centrifuge flammable, explosive or corrosive materials.
- Do not use solvents or flammable media near this or other electrical equipment.
- In case the unit is dropped from the table, please check the casing for any cracks/damage.
- The centrifuge and its components are non autoclavable.
- Do not use the centrifuge in any manner not specified in these instructions.
- Use mild soap solution to clean & disinfect. Do not using sanitizer / IPA solutions.

7. INSTALLATION



This mini centrifuge is supplied in a packaging box. Open the box, then gently

remove the centrifuge from the box and plug in the power adaptor pin before connecting to the main power source. The instruction manual and the accessories should be kept with the centrifuge. Please keep all packaging in safe storage for at least 2 years for warranty purposes.

Make sure the rotor is tight to avoid any accident. Load the rotor with the micro tubes for centrifugation. Place the ON/OFF switch to "o" on back side and close the lid to start centrifugation.

For more clarification refer to the RCF chart below:-

| RCF CHART (FIXED) | | | | | |
|-------------------|-------------|--------|--------|------|-----------|
| RPM | ROUND ROTOR | | | | PCR STRIP |
| | 0.2 ml | 0.5 ml | 1.5 ml | 2 ml | |
| 3000 | 319 | 424 | 468 | 488 | 467 |
| 4500 | 718 | 953 | 1053 | 1098 | 1050 |
| 6000 | 1276 | 1695 | 1872 | 1952 | 1868 |

8. ROTOR BALANCING

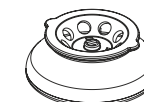
1. Always balance the rotor before centrifugation. The following are symmetrical loadings of centrifuge tubes to the rotor.



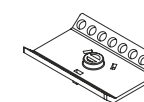
2. Ensure that the samples in the tubes are of equal volume.
3. Symmetrical loading of tubes in the rotor is necessary, otherwise vibration can occur which can cause serious damage to the centrifuge.
4. The following are the incorrect methods of loading tubes in the centrifuge the rotor.
5. The following are the incorrect methods of loading tubes in the centrifuge the rotor.



9. INTERCHANGEABLE ROTOR



8 Slot Magnetic Rotor
8 x 0.2,0.4,0.5,1.5,2 ml



PCR Magnetic Rotor
16 x 0.2 ml

10. CHANGING THE ROTOR

This centrifuge feature magnetic rotors. Thus changing the rotors can be done without any tool. The rotors fit on the central shaft of the motor through magnet situated at the both the rotors (MCT & PCR rotor). The rotor fits through snap to the central shafts through gentle guidance into the groove on the rotor adapter.

