

Refrigerated Centrifuge

User manual

SAFETY INFORMATION - A centrifuge spins samples at high speed; the centrifugal force causes denser materials to travel to the bottom of the centrifuge tube rapidly. This allows for the separation of liquid and solid samples. Failure to observe the following precautions could result in serious personal injury:

- ❖ To avoid Mechanical failure, Properly balance the centrifuge before using it. Centrifuged are most easily balanced with container pairs that are placed directly across from each other.
- ❖ Load all of the buckets and adapters, even if you are only using two out of four. Ensure that they are properly balanced. Never leave the centrifuge unattended until it is at the desired operational speed. Wait until the centrifuge gets to speed and observe if there are any signs of mechanical failure (e.g. shaking, odd noises).
- ❖ Never open a centrifuge when it is running. Allow the centrifuge to come to a natural stop, do not try to slow or stop a moving centrifuge.
- ❖ Inspect all tubes and containers for cracks before using them. Never use a centrifuge tube that is cracked. Broken centrifuge tubes can lead to machine imbalance, causing failure and injury.

Operation:-

1. Switch on Centrifuge. Inspect the centrifuge to ensure it is working properly, there is no damage, and that the centrifuge is able to move freely.
2. Select the appropriate centrifuge tubes or containers, and inspect them to ensure no cracks or flaws. Discard any tubes/containers that are cracked or flawed.
3. Fill tubes with the desired liquid. Make sure that the outside of the centrifuge tubes are clean and dry before placing them in the centrifuge.
4. Balance the tubes within the centrifuge.
5. Close the lid. Make sure the lid has a tight fit.
6. Set the run speed and run time. (Never use the rotor's maximum run speed).

7. Do not leave the centrifuge until it is operating at full speed and the machine seems to be running smoothly. Ensure that there is no abnormal noise or vibration.
8. Once the centrifuge has completed its run, allow the centrifuge to stop its rotation before opening the lid. Never open the lid or touch the centrifuge before it has stopped its rotation. **NEVER TRY TO HASTEN THE STOPPING PROCESS!** Stopping the machine prematurely can be led to injury and mechanical failure.
9. After the centrifuge has completely stopped moving, you may remove your samples from the centrifuge.
10. Switch off Centrifuge.
11. Clean up any spills immediately.