Swinging bucket rotors are more suited for sedimentation than fixed angle rotors and particularly advantageous under a very small amount of precipitation. In contrast, TC tubes have a conical bottom where deposits tend to accumulate after centrifuging. The following reports on our observation of differences in precipitation state between the swinging bucket rotor and fixed angle rotor by using a 50TC conical tube.

### Description

1. **Centrifuging conditions**
   - **Centrifuge**: High-speed refrigerated centrifuge CR-GIII series
   - **Rotor**: R8S swinging bucket rotor (4-place type)  
     - R15A fixed angle rotor (10-place type)
   - **Centrifuging tube**: 50TC conical tube
   - **Rotation speed**: 8,000 rpm (R8S swinging bucket rotor)  
     - 8,910 rpm (R15A fixed angle rotor)
   - **Maximum RCF**: 11,500 x g

2. **Method of experimentation**
   - Dispense 40 ml of bentonite suspension into a 50TC conical tube.
   - Centrifuge the R8S swinging bucket rotor at 8,000 rpm and the R15A fixed angle rotor at 8,910 rpm for 5 minutes each.
   - Observe the state of precipitation after centrifugation and take photos of the precipitation.
The findings below suggest that swinging bucket rotors are more suited for sedimentation than fixed angle rotors.

**Results**

The precipitation accumulate at the bottom of the tube and are easy to collect.

R8S swinging bucket rotor

The precipitation slip from the tube walls.

R15A fixed angle rotor

The precipitation get caught on the tube’s angular sections.

If you have any inquiry of this application or products, please contact us through our web site.

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