Transferring NMR Samples into NMR Tubes

Purpose This procedure provides information on how to transfer prepared NMR samples into NMR tubes for data acquisition on any of NMR spectrometers.

(Materials)

Reagents	Supplies	Equipment
•	• Insulated gloves • NMR tubes	• Microcentrifuge • Rainin pipette • Vortex

Procedure

Step	Details
1.	Label your NMR tube with the project number and sample name. Write both on an NMR tube label.
2.	If the NMR sample is frozen, allow to thaw on bench to room temperature. If using a freshly prepared NMR sample, continue to Step 3.
3.	Vortex each sample for 30 seconds. NOTE: If precipitate is present, the samples must be centrifuged for 3 minutes at 10,000 rpm using the Microcentrifuge.
4.	Transfer supernatant into the pre-labeled NMR tubes. 1. Using a (100-1000 µL) pipette, take an aliquot of the NMR sample. NOTE: It is recommended to add 185 µL and 560 µL of the NMR sample in 3mm and 5mm NMR tube, respectively. 2. Holding the NMR tube at a slight angle, and holding your pipette upright, place the tip of the pipette against the inner wall of one side of the NMR tube. Ensure there is space between the other side of the NMR tube wall and your pipette tip. 3. Slowly pipette a portion into the tube. NOTE: If an air bubble forms and the sample is stuck near the top of the tube, gently flick the NMR tube lightly to get the sample to go down the tube. Alternatively, cap the tube and swing the tube in a downwards motion to force the sample further down the NMR tube. 4. Pipette the rest of the NMR sample into the NMR tube in this manner.
5.	Cap the tube and spin down the NMR tube for ~2 minutes.
6.	Place prepared NMR tube sample into a NMR tube rack. Place in refrigerator (4°C) until NMR acquisition.

References Not applicable

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