Fat Sample Collection XT10/XT10I

OVERVIEW: The following procedure details the process for collecting fat for further analysis using your ANKOM XT10 Fat Extractor. You will need to have a properly retrofitted ANKOM XT10 Fat Extractor, per SP186, to accommodate the collection of extracted fat. Contact ANKOM with the Serial number of your model if you have any questions as to the compatibility of your model for this process.

 In order to properly analyze the collected fat run the extractor with only one sample at a time. In order to obtain enough fat to analyze, we suggest extracting fat from several bags of the same sample at one time. The display should read "Remove/Insert Samples {Enter}".



Figure 1

2. Press down the Safety Valve Handle on right to release the Safety Valve Pin and rotate the Main Handle counter-clockwise until it stops. See Figure 2.



Figure 2

3. Use the Extraction Vessel Handle to pull the Extraction Vessel out as shown in Figure 3.



Figure 3



4. Slide the Extraction Vessel toward you far enough to remove the white Teflon Insert. Refer to Figure 4.



Figure 4

5. Obtain Glass Insert and Tongs (X100) and slide Glass Insert into vessel.

Reference Figures 5 and 6. At the conclusion of the extraction process, the fat will have collected in the Glass Insert and can be withdrawn for subsequent analysis.



Figure 5



Figure 6

6. Put the Bag Holder (with up to 15 bags) into the Teflon Insert. Note: to analyze collected fat from one sample, run only one sample at a time. Multiple bags are recommended to ensure you obtain enough collected fat for analysis. See Figure 7.



Figure 7

- 7. Press Enter on the Keypad. On the display you should see "Select time {^\\}...{Enter}." The number shown may not be 60. Using the Up or Down arrows on the Keypad, select the Extraction run time. Recommended run time is 60 minutes. Press Enter on the Keypad.
- 8. The display should now read, "Heat Temp 90 {^\\}... {Enter}." The number shown may not be 90. Using the Up or Down arrow keys on the Keypad, select the Temperature. The recommended maximum temperature is 90°C. Press Enter on the Keypad. Refer to Figure 8.



Figure 8

9. The display should now read, "Insert Solvent {Enter}." Ensure that the vessel is cool. Pour 200 ml of solvent into Glass Insert in the Extraction Vessel.

NOTE: The recommended solvent for use in the ANKOM^{XT10} Extraction System is Petroleum Ether with a boiling point range of 35°C to 65°C. If you want to use other solvents, contact ANKOM Technology to determine compatibility.



Figure 9

 Put the Teflon Insert back into the Extraction Vessel, aligning the Teflon Insert slot with the Extraction Vessel pin.

Teflon Insert O-Ring

Extraction Vessel O-Ring

Teflon Insert Slot and Extraction Vessel Pin -



Figure 10

IMPORTANT: The Teflon Insert O-ring must be in place before running the instrument. The Extraction Vessel O-ring must be in place before running the instrument. The Teflon Insert slot must be aligned with the Extraction Vessel pin before running the instrument.

- 11. Pour 150 ml of solvent directly into the Teflon Insert that was placed back in the Extraction Vessel.
- 12. Press ENTER on the Keypad. The display should now read, "Close Vessel Water On {Start}."



Figure 11



13. Slide the Extraction Vessel into the instrument ensuring the Extraction Vessel O-ring stays in place as shown in Figure 12.



Figure 12

14. Pull the Main Handle downward, closing and locking the Extraction Vessel in place. You will hear a click noise when the Safety Valve Pin locks in place. Reference Figure 13.

IMPORTANT: Before running the instrument, verify that the Extraction Vessel is locked in place by attempting to rotate the Main Handle upward.



Figure 13

15. Refer to Operators Manual for remainder of instrument operation. See Operators Manual Rev. E. p.16.

NOTE: Your ANKOM $^{\rm XT10}$ Fat Extractor will take somewhat longer to heat up due to the insulative properties of the Glass Insert.