



DeltaTox ATP Procedure

This procedure details the use of the DeltaTox Analyzer in conjunction with the ATP Reagent which is supplied by Strategic Diagnostics, Inc. Should other reagents be utilized, please refer the Manufacturer's Instructions for those specific reagents, as there may be different protocols required.

Required Materials:

DeltaTox Analyzer
Glass Cuvettes
Cuvette Rack
100 uL Pipette
50 – 200 uL Pipette Tips
Stopwatch
ATP Reagent
ATP Diluent
ATP Extractant

Procedure:

1. Remove a vial of ATP Reagent from the refrigerator. Unscrew the cap and carefully remove the stopper. Remove a vial of ATP Diluent and unscrew the cap.

NOTE: The reagents are vacuum-sealed. Remove the stoppers slowly. To avoid contamination, do not touch the inside portion of the stopper.

2. Pour the entire contents of the ATP Diluent vial into the ATP Reagent vial.
3. Cap the ATP Reagent vial with the stopper. Mix the Reagent by grasping the neck of the vial and applying a gentle swirling motion while the bottom of the vial rests on the work surface.

NOTE: Shaking the vial will inactivate the reagent

4. Wait ten minutes for the reagent to rehydrate and come to room temperature. To insure thorough mixing, occasionally swirl the vial gently.

NOTE: The reagent will be good for 8 hours at room temperature (18-28 °C; 65-83 °F).



5. While waiting for the reagent to come to room temperature, connect the DeltaTox Analyzer to an electric power source (or install 5 “C” batteries).
6. Turn on the DeltaTox by pressing the “ON” key. Wait 1 minute for the instrument to perform a self-test. When it is finished, the display will show: TOX function, Time, Date and Temperature.

NOTE: The DeltaTox sample chamber must be empty, the lid closed and the side latch locked in the forward position for the self-test. If they are not, an error message – “UNABLE TO SET PMT LEVEL”- will appear on the display.

7. Press the MODE key once to convert the instrument to ATP measurements.
8. Press the START key. The instrument will perform a 15 second self-test and then display the message: “INSERT CUVETTE 001.” The instrument is now ready to begin taking measurements. Set it to one side while the samples are prepared.
9. Place a cuvette for each sample in the test cuvette rack.

NOTE: Up to 10 samples can be tested at one time.

10. Using the 100 uL pipette, dispense 100 uL of each sample into its corresponding sample cuvettes.

NOTE: A fresh pipette tip should be used for each sample to avoid contamination.

11. The ten minute period required for the rehydrate ATP Reagent to come to room temperature should now be up. If not, stop sample preparation until the remainder of the time has expired.
12. Using the 100 uL pipette, add 100 uL of ATP Extractant to one sample cuvette. (**DO NOT** attempt to add the ATP Extractant to more than one sample cuvette at a time, as it is not possible to run multiple samples concurrently). Gently swirl for 2 seconds and then let the cuvette stand for 1 minute.

NOTE: Use a new pipette tip for each step of the sample preparation..

NOTE: Shaking or vortexing the cuvettes will deactivate the samples.

13. Using the 100 uL pipette, add 100 uL of reconstituted ATP Reagent to the cuvette containing the sample and Extractant. Gently swirl for 2 seconds.



14. **IMMEDIATELY** insert the sample cuvette into the DeltaTox instrument. Close the sample chamber lid and lock it by pulling the latch forward.
15. Press the READ button. The ATP measurement for this sample will be displayed on the screen. Record this value.
16. Repeat Steps 12 through 15 for each of the remaining samples.
17. After all of the samples are completed, press the “STOP” button to end the testing session.

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