

481396-W Arsenic Wood Test Method

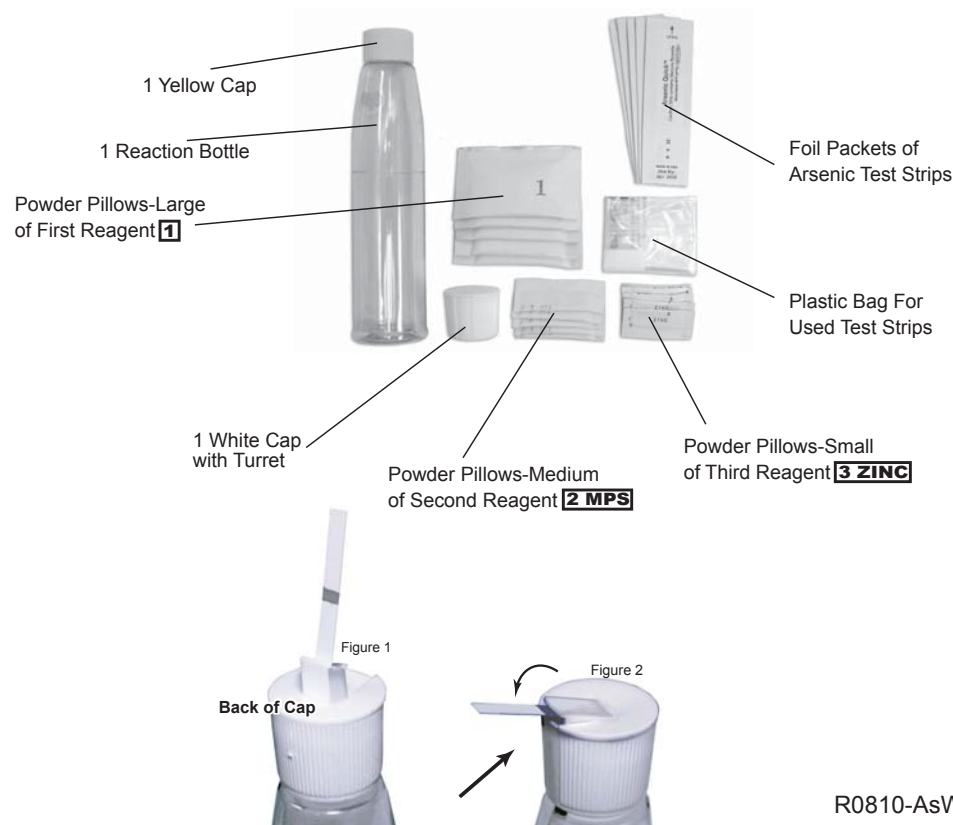
Ordinarily you could cut small wood splinters with a sharp knife from non-weathered wood to test for arsenic; however, since weathered wood will have the arsenic leached out from the surface, this technique would not get a representative wood sample. The older and more weathered the wood the deeper sample core of the wood is required. We recommend that you use a ¼" drill bit and a portable drill. Sampling the wood: Using a ¼" drill bit, drill a wood sample from an intact location on the wood. Usually a sample drilled ½" deep is adequate. If wood is older than 20 years you should drill about ¾" into the wood to get a good wood sample. Drill slowly into the wood, and simultaneously you should have a small, stiff cardboard (or any other convenient collector) below the drilling area to catch the drill dust generated by the drilling. Additional wood material will be generated as you pull out the drill from the core. This material must be added to the sample for testing. Carefully add all the wood drilled dust generated to the Reaction Bottle. You are ready to do the Arsenic Test.

1. Add wood chips (see procedure above) to the Reaction Bottle.
2. Add 50ml (fill to line) of tap water to the reaction bottle.
3. Add 1 Powder Pillow (Large) of First Reagent **1** to the Reaction Bottle.
4. Add 1 Powder Pillow (Medium) of Second Reagent **2 MPS** to the Reaction Bottle.
5. Cap bottle with yellow mixing cap and shake vigorously for 15 seconds to dissolve the reagents in the water.
6. Let the solution sit for 2 minutes, which extracts arsenic from wood.
7. Add 2 Powder Pillows (Small) of Third Reagent **3 ZINC** to the reaction bottle. Cap securely with the yellow mixing cap and shake vigorously for 5 seconds. For best results, complete Steps 8 and 9 within the next 30 seconds.
8. Remove yellow mixing cap. Recap bottle securely using the white cap (must be dry) with turret up (open).
9. Remove one Arsenic test strip from the test strip foil packet. In order
Instructions continued on back...

for the results to be accurate, the test strip must be oriented correctly, and inserted to the correct depth. Insert the test strip into the turret as illustrated in Figure 1 and Figure 2. Position the strip so that the test pad and red line are facing the back of the white cap. (see Figure 1). Insert the strip into the turret until the red line is even with the top of the turret, and close (flip down) the turret (see Figure 2). This will hold the test strip in place.

10. Using a timer, allow the reaction to occur in an undisturbed, well ventilated area for 5 minutes. Reaction generates small hydrogen gas bubbles and arsine gas if arsenic is present.
11. After the 5 minute wait, pull up the turret and carefully remove the test strip. Do not touch the reaction pad. Observe the color of the test strip and determine arsenic concentration:
White indicates absence of arsenic (no arsenic).
Yellow indicates moderate amount of arsenic present (arsenic present).
Brown indicates high amount of arsenic present (arsenic present).

Complete color observation immediately (within 30 seconds).



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