



## LOW RANGE ARSENIC TEST KIT

CODE 4053-02

QUANTITY	CONTENTS	CODE
380g	*Arsenic Reagent #1 Powder	*4054-L
3 x 25g	*Arsenic Reagent #2 Powder	*4055-G
6 x 30g	*Arsenic Reagent #3 Powder	*4056-G
1	*Arsenic Test Strips, 50 strips	*4057-H
1	Scoop, 5 cc, yellow	31712
1	Scoop, 1 cc, white	31710
1	Scoop, 1 cc, red	31709
2	Bottles	28145
2	Caps, black, plain	28680
2	Caps, white, flip-top	28556
1	Waste Bag	—
1	Arsenic Color Chart, 4-400 ppb	4053-02-CC

**\*WARNING:** Reagents marked with an \* are considered to be potential health hazards. To view or print a Material Safety Data Sheet (MSDS) for these reagents go to [www.lamotte.com](http://www.lamotte.com). To obtain a printed copy, contact LaMotte by e-mail, phone or fax.

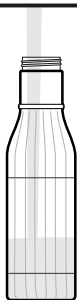
# WARNING!

This test procedure produces arsine and hydrogen gases. These gases are poison and explosion hazards. Perform test procedure a) outdoors, b) indoors in a well ventilated room or lab, or c) in a chemical fume hood if available.

WARNING! This set contains chemicals that may be harmful if misused. Read cautions on individual containers carefully. Not to be used by children except under adult supervision

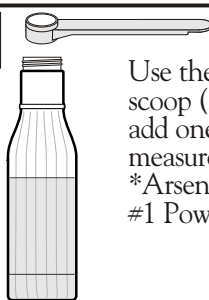
## PROCEDURE

1.



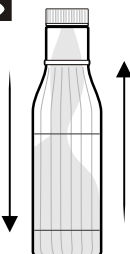
Fill a bottle (28145) to the upper (250 mL) line with the sample to be tested.  
**NOTE:** For the most accurate results, the temperature of the sample should be between 18°-24°C (65-75°F).

2.



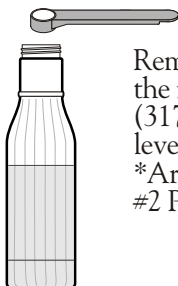
Use the yellow scoop (31712) to add one level measure of \*Arsenic Reagent #1 Powder (4054).

3.



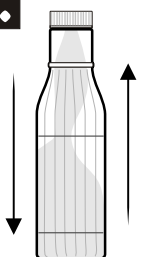
Cap the bottle with the black cap (28680). Hold the bottle upright. Shake vigorously for 15 seconds.

4.



Remove cap. Use the red scoop (31709) to add one level measure of \*Arsenic Reagent #2 Powder (4055).

5.

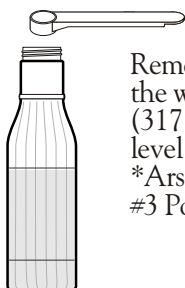


Cap the bottle with the black cap. Hold the bottle upright. Shake vigorously for 15 seconds.

**NOTE:**

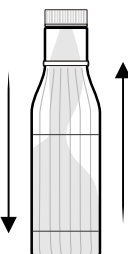
Hydrogen sulfide will interfere with the test result. If the sample contains hydrogen sulfide, wait 2 minutes before proceeding with Step 6. This will minimize the interference of up to 2 ppm hydrogen sulfide.

6.



Remove cap. Use the white scoop (31710) to add one level measure of \*Arsenic Reagent #3 Powder (4056).

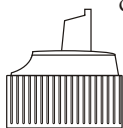
7.



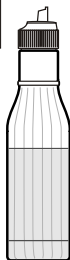
Cap the bottle with the black cap. Hold bottle upright. Shake vigorously for 5 seconds.

**8.**

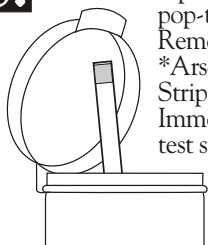
Flip open the spout of the white flip-top cap (28556).

**9.**

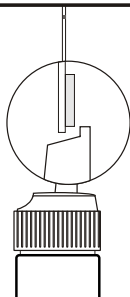
Remove the black cap from the bottle. Place the white flip-top cap, with the spout open, on the bottle.

**10.**

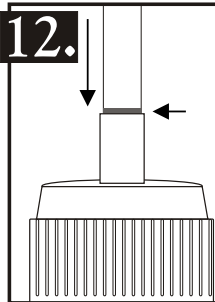
Open test strip pop-top bottle. Remove one \*Arsenic Test Strip (4057). Immediately close test strip bottle.

**11.**

Insert test strip into open spout of the white cap with the red line and the pad facing the tallest edge of the spout.

**12.**

Insert the strip into the spout until the red line is even with the top of the spout. Flip the spout down to hold the test strip in place.

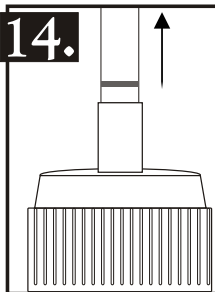
**13.**

Wait 10 minutes.

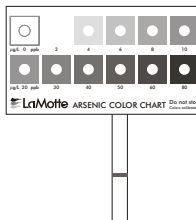
**NOTE:** The reaction should be performed in a well-ventilated area. Gas bubbles will form during the reaction. Do not disturb the bottle during the reaction period.

**14.**

Flip up the spout and carefully remove the test strip. Do not touch the pad.

**15.**

Immediately compare the color of the pad to the Arsenic Color Chart (4053-02-CC). The reaction must be read within 30 seconds. Record the result as ppb Arsenic.



*continued on next page*

**NOTE:** For best accuracy at levels greater than 30 ppb arsenic.

Dilute the sample and retest as follows: Fill the bottle to the lower (50ml) line with the sample to be tested. Fill the bottle to the upper (250ml) line with arsenic free water. Follow steps 2-15 of the test procedure. Multiply the result by 5. Record the result as ppb Arsenic.

*continued on next page*

- 16.** After testing, pour the reacted sample down the drain with excess water. Avoid using sinks in food preparation areas. Rinse bottles and all caps with water. Before running the next test, shake off as much water as possible from the caps. Place used strips in the Waste Bag for later disposal according to local regulations for mercury waste.

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