Alco-Breath Tube Breath Alcohol Test
Training and Certification for Test Administrators

The information provided is intended to educate test administrators in the use of the Alco-Breath Tube breath alcohol test device. The following information covers the intended use of the device, warnings and precautions, test principle, steps to administer the test, and interpreting results. Students who satisfactorily complete a written exam included with this material receive a certificate as test administrator for this device.

Intended Use

The Alco-Breath tube is a pass/fail test to test for alcohol in human breath. It is a disposable device designed for on-time use. The device is a screening test that give preliminary results.

The Alco-Breath Tube uses a chemical reaction that creates a color change to indicate the presence of alcohol. Alcohol in the breath causes the yellow crystals to change to a green color. Higher amounts of breath alcohol cause the green color to move higher up the tube, like a thermometer. The Alco-Breath Tube devices are calibrated to estimate alcohol levels up to .08% and .15%. The ABT-08 device detects alcohol from 0.02 – 0.08 BrAC. The ABT-15 device detects alcohol from 0.02 – 0.15 BrAC.

The Alco-Breath tube is a disposable device designed for one-time use.

Limitations on Use

The Alco-Breath Tube gives preliminary screening test results. Test results obtained with the Alco-Breath tube are not intended to be used as evidential results. Non-negative preliminary test results obtained with the Alco-Breath tube should be confirmed with an evidential quality breathalyzer when evidential results are required.

Warnings and Cautions

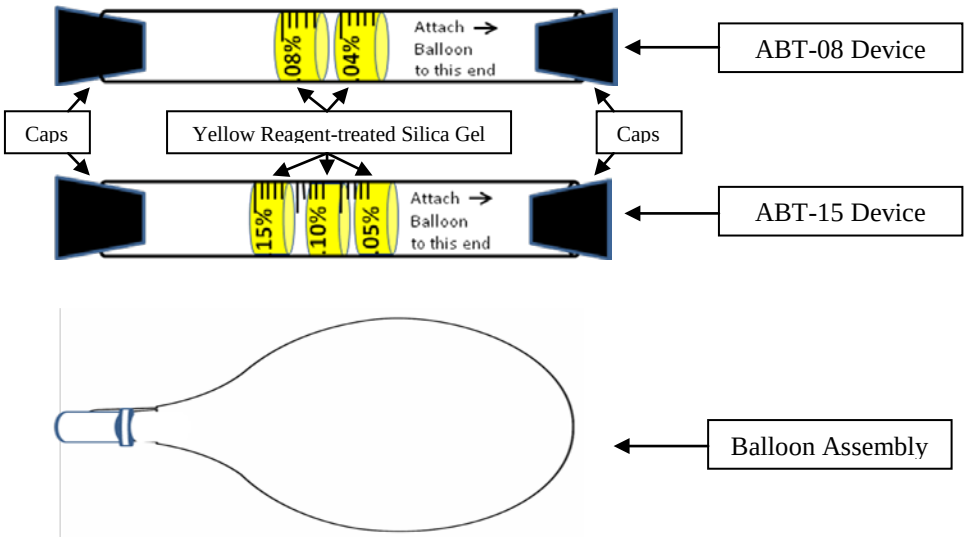
- Alcohol impairs judgment. Do not test yourself OR drive if you have been drinking. Do not use this test to determine if it is safe for you to drive. The actual result may be significantly higher or lower than indicated by this product. Someone who has not been drinking should help conduct the test and read the results.
- Keep out of the reach of children.
- Do not immerse in liquid.

- Do not inhale or eat the contents of the test. This product contains potassium dichromate, a hazardous chemical. If ingested, induce vomiting and contact your physician.
- The Alco-Breath Tube is not intended to legally determine the presence of alcohol or concentration of alcohol in a person. This product should be used only as a screening device and is only an indication of the possible presence of alcohol in the blood of the user. The exact level of alcohol in the blood cannot be accurately determined by using this product. The actual result may be significantly higher or lower than indicated by this product.
- A positive result should be taken as a warning that a subject may have detectable alcohol in their system. A positive result should be confirmed by an evidentiary alcohol test before any legal or workplace actions are taken.
- There may be times that a person tests negative and later show that he or she is under the influence of alcohol or their judgment had been impaired by alcohol.
- For best results read test in indirect sunlight, incandescent or florescent lighting. The color change may be difficult to see under some streetlights and in dim light and poorly light areas.
- Do not use if glass tube is broken or if crystals are green or are not yellow.
- Do not interpret the test if color blind or visually impaired.
- Do not use after expiration date marked on package.

Description of Alco-Breath Tube Device

The Alco-Breath tube device consists of two parts: A glass tube containing reagent-treated silica gel, and a balloon assembly.

The ABT-08 device contains two bands of yellow reagent-treated silica gel, and the ABT-15 contains three bands of yellow reagent-treated silica gel.



Principle of Operation

The Alco-Breath tube uses a length-of-stain method to detect alcohol and to give estimates of breath alcohol concentrations. Silica gel is treated with a reagent containing potassium dichromate that gives the silica gel a distinctive yellow color. Each tube also contains moisture-indicating silica gel with a deep blue color to enhance the stability of unused test devices.

When the reagent-treated silica gel is exposed to breath alcohol that is passed through the tube, the alcohol in the breath creates a chemical reaction that changes the yellow color to a green color. The green color moves progressively up the length of the tube proportional to the amount of alcohol in the breath. Higher concentrations of alcohol in the breath will cause more of the yellow reagent-treated silica gel to turn green.

Any change of the yellow reagent-treated silica gel from yellow to green indicates the presence of alcohol. The test administrator estimates breath alcohol concentration using a scale on the tube to read the upper level of the color change, much like reading a thermometer.

The green color change caused by exposure to breath alcohol will remain stable for several months. The green color may change to a darker green over this time. However, test results that approach the maximum reading on the scale (0.08% or 0.15%) at the time of the test may continue to react over several days to turn the entire band of yellow reagent material green.

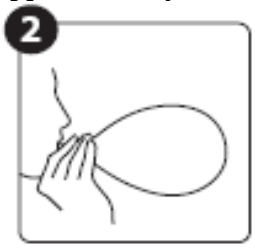
Breath that contains no alcohol will not change the color of the yellow reagent-treated silica gel. If the reagent-treated silica gel remains yellow after breath has passed through the device, the test result is negative.

Instructions for Using the Alco-Breath Tube

Wait 15 minutes after the last alcoholic beverage to allow remnants of alcohol in the mouth to dissipate. Alternatively, drink 10 ounces of water before use.

1. Remove the caps from the glass tube and empty the blue crystals from both ends of the tube.

2. Instruct the subject to fully inflate the balloon with deep continuous breaths. This will typically require two or three deep breaths. The diameter of a fully inflated balloon is approximately 6” to 8”.



3. Pinch the neck of the inflated balloon so air does not escape. Insert the end of the tube labeled “Insert Balloon Here” into the balloon mouthpiece.

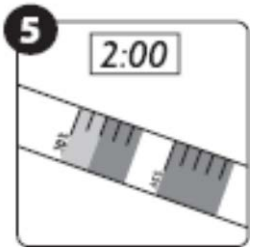
4. Allow the breath from the balloon to pass through the tube for one minute. The breath in the balloon will slowly seep through the tube. The tube will become warm to the touch; this is normal.

Remove the balloon from the tube after one minute. Replace the plugs into each end of the glass tube to maximize the preservation and stability of test results.

Wait two minutes before interpreting the results.

Interpreting Results

5. Read the test two minutes after removing the balloon from the tube.



Any color change from yellow to green indicates the presence of alcohol.

Estimate breath alcohol concentration by using the scale on the test, much like reading a thermometer. The number on the scale at the highest level of color change indicates estimated breath alcohol concentration.

Limitations of the Procedure

- The Alco-Breath Tube is designed for use with breath only.
- Estimates of breath alcohol concentration are considered preliminary results, and do not meet standards to be used for evidential purposes.

Alco-Breath Tube Certification Test

Instructions: Write the answer to each question on the answer sheet. Complete your identifying information on the answer sheet and fax or mail to AlcoPro, Inc. Scores of 80% and above will receive a certificate as Test Administrator.

1. The Alco-Breath tube is intended for use as
   a. A screening device to give preliminary results.
   b. A device to legally determine intoxication.
   c. A device that can be used by color-blind persons.
   d. An evidential device.

2. The Alco-Breath tube gives _____ results.
   a. Confirmation
   b. Preliminary
   c. Qualitative
   d. A and B

3. Each Alco-Breath tube device may be used _____ time(s).
   a. 4
   b. 3
   c. 2
   d. 1

4. The ABT-08 detects alcohol in the range of
   a. 0.20 to 0.80 BrAC
   b. 0.02 to 0.08 BrAC
   c. 0.02 to 0.15 BrAC
   d. 0.08 to 0.15 BrAC

5. The ABT-15 detects alcohol in the range of
   a. 0.20 to 0.80 BrAC
   b. 0.02 to 0.08 BrAC
   c. 0.02 to 0.15 BrAC
   d. 0.08 to 0.15 BrAC

6. A color change from yellow to _____ indicates the presence of breath alcohol.
   a. blue
   b. red
   c. pink
   d. green

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7. The test administrator may estimate breath alcohol concentration by noting the _____ level of color change.
   a. lowest
   b. average
   c. highest
   d. median

8. The test administrator allows air from the balloon to pass through the test device for
   a. one minute
   b. two minutes
   c. 90 seconds
   d. until the balloon is fully deflated

9. The test administrator interprets test results _____ after removing the balloon from the test device.
   a. immediately
   b. 30 seconds
   c. one minute
   d. two minutes

10. To which end of the tube does the test administrator attach the balloon?
   a. The end marked “Attach Balloon to this end”
   b. Either end
   c. The balloon is not attached; the user blows directly into the device.

Alco-Breath Tube Certification Test Answer Sheet

Complete this Answer Sheet and return to AlcoPro, Inc. to receive Certificate.

Name: _____

Organization: _____

Address: _____

City, State, Zip: _____

Telephone: _____ Fax: _____

Email: _____

Fax to 865 525-4935, email to alcopro@alcopro.com, or mail to

AlcoPro, Inc.
PO Box 10954
Knoxville, TN 37939

Answers: *(write letter corresponding to each answer)*

1. ___
2. ___
3. ___
4. ___
5. ___
6. ___
7. ___
8. ___
9. ___
10. ___