

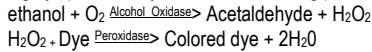
# MCC Saliva Alcohol Test

## INTRODUCTION

MCC Saliva Alcohol Test is intended for use as a rapid, non-invasive and highly selective method to detect the presence of alcohol in saliva. It provides a semi-quantitative estimation of blood alcohol concentration. It is a screening test only. A positive MCC Saliva Alcohol Test result must be verified by an accepted quantitative alcohol test such as gas chromatography. It requires no instrumentation and special training except the careful following of instructions.

## PRINCIPLE OF PROCEDURE

Ethanol distributes between blood and saliva according to the water content of these fluids. It has been shown that concentration-time profiles of ethanol in blood, breath and saliva are very similar (2,3). National Highway Traffic Safety Administration (NHTSA), therefore considers use of one-to-one conversion factor between blood and saliva to be appropriate (4). MCC Saliva Alcohol Test employs a sequential enzymatic reactions to detect presence of alcohol in saliva. The detection reagents are immobilized in a small square pad. When the pad comes into contact with the alcohol containing liquid, it changes colors from beige to green to blue to brown depending upon the alcohol concentration of the sample. The alcohol concentration can be estimated by comparing the color developed on the pad with the color block printed on the color chart. The highly specific enzymatic reaction taking place on the pad can be written as :



## REAGENTS

Per test unit:

1. Alcohol Oxidase
2. Peroxidase
3. Buffer
4. Stabilizers
5. Tetramethylbenzidine

## PRECAUTION

- In vitro diagnostic use only.
- Do not use beyond expiration day.
- The test device should not be reused.
- The test strip is moisture sensitive and should be used immediately after taking out of the pouch.

## ASSAY PROCEDURE:

**MCC**  
MEDICAL & CLINICAL CONSORTIUM

**SALIVA ALCOHOL TEST**

**Direction for use:**

1. Insert pad end of test strip into mouth and saturate with saliva.
2. After complete saturation of pad, remove test strip from mouth and read at the end of 2 minutes. (Test not valid after 10 minutes.)
3. Compare pad end of test strip to the color chart.

This test shall not be used to determine one's ability to legally operate a motor vehicle or other heavy equipment. Any decisions based on the result of this test are the sole responsibility of the user.

**INTERPRETATION:**  
NEGATIVE - No color change on reactive pad.  
POSITIVE - Reactive pad changes color in 2 minutes

**Approximate Blood Alcohol Level**

0.30%
0.08%
0.04%
0.02%

**Made in the U.S.A.**



## INTERPRETATION OF RESULTS

MCC Saliva Alcohol Test reagent pad reacts with alcohol in the test sample. The color blocks indicating different concentrations of alcohol from negative to 0.3% are printed on the package. If the color developed on the reagent pad falls between two adjacent color blocks, then approximate the alcohol concentration between the values of the adjacent color blocks.

## QUALITY CONTROL

The integrity of MCC Saliva Alcohol Test may be qualitatively verified by using a test solution prepared by adding 5 drops 80 proof distilled spirits to 8 ounce (1 glass) of water. This solution should provide a color reaction equal to or higher (darker) than the 0.04% color block. Alternatively, if the strip is dipped in beer, a dark blue color develops immediately and turns dark brown. The reaction of MCC Saliva Alcohol Test with alcohol in saliva is somewhat slower and less intense than with alcohol in aqueous solution. Commercially available controls that contain preservatives cannot be used.

## STORAGE AND STABILITY

1. MCC Saliva Alcohol Test should be stored at room temperature between 15-30°C (59-86°F).
2. The test kit should be kept away from direct sunlight, moisture and heat.
3. If the product has been kept in the refrigerator, it should be brought back to room temperature.

## BIBLIOGRAPHY

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3. Jones AW, J. Anal. Toxicol., 19, 169-174, 1995
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MCC

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