

XEMA_{TEST} Alco

Enzymatic test for semiquantitative determination of ethyl alcohol in drinks and foods



TEST PRINCIPLE

Consumption of ethyl alcohol (ethanol) is strictly prohibited by some religious confessions. Ethanol is also toxic and may cause addiction (alcoholism). XEMA_{TEST} Alco is based on a principle of enzymatic test and is designed for rapid semiquantitative determination of traces amount of ethanol in soft drinks, food extracts and washouts from dishes, kitchen or manufacturing equipment in food industry.

Ethanol from the sample is converted by the specific enzyme attached to the sensor pad of the test strip, during this conversion the color of the sensor pad is changing proportionally to the ethanol load.

XEMA_{TEST} Alco allows to perform rapid detection of ethanol with high degree of sensitivity and specificity.

TEST SENSITIVITY AND SPECIFICITY

In aqueous solutions sensitivity of XEMA_{TEST} Alco is 0.02% vol/vol – this concentration corresponds the first grade of color change in sensor pad. A present test shows equal sensitivity to methyl alcohol (methanol), other simple alcohols (propanol, isopropanol, butanol, isobutanol) show lower sensitivity (3-10 fold). XEMA_{TEST} Alco does NOT detect higher alcohols, aldehydes and ketones (including acetone).

If the visual test gives unclear results, we recommend to re-check the ethanol content by the quantitative laboratory methods.

KIT CONTENTS

- 25 test strips packaged into sealed vial;
- Instruction for use.

SPECIMEN HANDLING

The specimens should be brought to the temperature range +18...+30 °C before use; testing of colder specimens diminishes the sensitivity of the assay; testing of hot specimens is NOT possible!

Liquid specimens (juices, soft drinks, washout from kitchen dishes or technological surfaces) may be tested directly.

TEST PROCEDURE FOR SOLID MATERIALS

1. If the test strips were stored below 20 °C, bring the required quantity of the strips to the room temperature before opening the pouches.
2. Open the vial, take out necessary number of test strips. IMMEDIATELY CLOSE THE VIAL TIGHTLY TO PREVENT WETTING OF THE CONTENT, and proceed to the next step.
3. Dip the sensor pad of the test strip into the liquid specimen.
4. After 15 seconds remove the test strip from the specimen, immediately wash the sensor pad by running tap water (or by extensive washing in glass of tap water) within 2-3 seconds.
5. Remove excessive fluid from sensor pad carefully by textile adsorbent or flicking.
6. Within an INTERVAL between 1 and 3 minutes compare the color of the sensor pad with the colors shown below and read the result in %.



0.00



0.02



0.10



0.25

PRECAUTIONS

- The test strips (dipsticks) should be stored at +10...+30 °C.
- Use the test within 10 minutes after opening the pouch because the test kit is very sensitive to moisture.
- DO NOT TOUCH the reaction membrane.
- Please, use the tests within 1 months after first opening of the tube!
- Do not use the kit when its pouch is torn, or test strip is broken or damaged.
- All the components of the test kit are disposable; do not use them repeatedly.
- Do not use the test strips beyond the expiration date.

MANUFACTURER:

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