

ELEAN MORIAN OIL ACIDITY FAST

REF 88002A - 50 tests  24 months, storage at 18-30°C

Description:

The fundamental classification of olive oil, including categories such as extra virgin, virgin, pure, etc., and the pricing of olive oil are contingent on its acidity level. A lower acidity level signifies the optimal health of the fruit, favorable harvesting conditions, and proper production and storage methods. The acidity of the oil is measured by the presence of free fatty acids expressed in grams of oleic acid per 100 grams of oil. A higher acidity number indicates a higher concentration of free fatty acids, which correlates with a deterioration in the oil's quality. The escalation in acidity is directly associated with processes of oxidation and rancidity. These issues stem from factors such as the degree of problems in the olive fruit (such as blight, freezing, bruising, or rot), the method of harvesting, milling processes, inadequate storage, and the blending of oils with older or degraded counterparts (such as pomace oil).

Suggested use:

The Elean Morian Oil Acidity Fast kit, developed by MenidiMedica Biotech Greece, is a rapid and user-friendly kit designed for the titration-based measurement of olive oil acidity. The kit includes all the necessary materials for conducting 10, 20, 50, 100, or 1000 tests.

Technical performance characteristics of Elean Morian Oil Acidity Fast kit:

- Measuring range: 0-1% acidity
- Measurement accuracy: 0.01% (0.01 mL)
- Analysis method: Titration
- Sample size: 5.5 mL

Storage:

The kit is recommended to be stored at room temperature (18-30°C). It is essential to avoid exposing the kit to high temperatures and direct sunlight. Refrigeration of the kit is not advised.

Method procedure:

1. Use the R1 syringe to add 5.5 mL of R1 reagent to the test vial.
2. Employing the SAMPLE syringe, add 5.5 mL of olive oil to the test vial.
3. Utilizing the 1 mL syringe, draw up a volume of R2 reagent equal to 1 mL and titrate drop by drop into the test vial, shaking each time. Cease titration when the color produced becomes a permanent pink or red after each shaking of the test vial.

Calculation of acidity (with example):

Fill the 1 mL syringe with 1 mL of R1 reagent. Titrate 0.12 mL of Reagent R2 into the test vial. Therefore, the acidity of the sample is twice the titration value. In the example case, it is calculated as 0.24% acidity.

Acidity = $V(R2) \times 2$, where $V(R2)$ is the volume of R2 reagent titrated.

References

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