



WHY CONTROL FRYING OILS?



During deep fat frying, the fats and oils are exposed to atmospheric oxygen and to moisture at high temperatures (over 160 °C) for long periods of time. As a consequence, a series of chemical reactions take place.

These reactions produce various harmful compounds and alter, at the same time, the fat/oil organoleptic characteristics (odor, color, taste) and the health effects of the oil/fat. Among these substances, polar compounds. The importance of controlling polar compounds is also regulated by several national regulations and Global health recommendations which prohibit the sale of foodstuffs which have been prepared or been in contact with oils with a polar content equal to or exceeding 25%.

WHY OLEOTEST?

Oleotest is a colorimetric assay that allows to determine the total polar compounds in frying fats in less than 2 minutes. It is a feasible and safe way to control the quality of frying fats without the need of sophisticated equipments.

INSTRUCTIONS OF USE

1. Open the tube containing the blue reagent.
2. The blue reagent has to be dissolved when the oil sample is poured into the tube. To achieve it, there are two options a) and b):

a) Pour the oil sample at room temperature up to the lower part of the label of the tube. Put the open tube in a microwave (use a small glass or something similar to prevent the tube from falling) and heat from 5 to 10 seconds at maximum power. If you do not have a microwave, heat some water and dip the tube properly closed until the mixture is dissolved.

b) Place the tube in the anti-burn holder and pour the warm oil sample (at least 60 °C) up to the lower part of the label. Wait a few seconds and close the tube tightly with the cap and remove the anti-burn holder. If the sample

does not reach the temperature required to melt the blue reagent, follow option a).

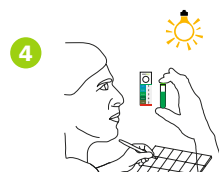
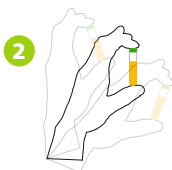
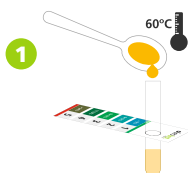
3. Shake the tube well (for a minute) in order to produce a uniform mixture (the color changes when the oil is mixed with the reagent).

4. Allow the mixture to settle for 2 minutes. Hold the tube vertically near a source of light and compare the obtained Acolor to the color scale.

5. At the end of the reaction, the mixture (fat and reagent) solidifies.

6. If the mixture reaches color 4 (17% to 23%), be extremely careful, as it is quite close to the 25% legal limit (BOE, Order of the 26th of January, 1989).

7. Keep the tubes away from direct light or heat (the reagent melts close to 60°C).



OBSERVATIONS

Oleotest is suitable for the most frequently used oils (sunflower oil, soybean oil, corn oil and peanut oil). Other types of oils may require a different color scale.

Oleotest remains stable after being used: keep the tubes so that you can use them in your auto-control system.



The use of glass instruments is not recommended; keep away from children