

# J-QUANT® Oil Quality Test Strips

## Background

Cooking oils are a collection of triglycerides, that in turn are made up of a number of different fatty acids. Whilst these oils are relatively stable at room temperature, once heated in the presence of moisture and oxygen, they can degrade quite rapidly. As the oils start to breakdown, they release a number of by products which, not only have an effect on the food being cooked, but can also be harmful to the human body.

There are a number of visual indicators that can determine the condition of the cooking oil. Good condition oil will always be clear and have a yellow strawlike appearance. As the oil breaks down, it will darken, eventually turning dark brown and becoming opaque. Oils also tend to smoke, foam, thicken and produce a rancid smell as they degrade. However, it is important to note that these characteristic features differ depending on the type of oil being used, making it a slightly unreliable way of checking whether cooking oil needs changing. A quick and convenient way of checking the quality of cooking oil is to measure the free fatty acid content. The more and more the cooking oil degrades, the higher the concentration of free fatty acid present within the oil. High levels of free fatty acid can lead to fried food which is extremely dark in colour and rancid tasting. Without being able to effectively monitor the quality of your cooking oil, restaurants can lose thousands in cooking oil replacements, when they are not needed, or in lost revenue when food is spoiled.

## Application

The J-QUANT® Oil Quality Test Strips 0-2.5% and 0-6% are an easy way to semi-quantitatively measure the free fatty acid content of cooking oil. They require no pre-sampling and can be used directly in the cooking oil whilst hot.

## Indications

- An indication of 2% free fatty acid in cooking oil shows that the break-down process has begun.
- An indication of 4% free fatty acid means that the quality of breaded foods such as chicken and fish should be checked. The oil should be discarded if unacceptable.
- An indication of 6% free fatty acid means that the quality of all other fried (battered) foods including chicken, fish and chips/fries should be checked. The oil should be discarded if unacceptable.
- If an extremely bright yellow colour is observed, then this indicates that the free fatty acid level is much higher than 6% and the oil should be discarded immediately.
- If a clearly indicated free fatty acid build up below 2% is needed then the lower level J-QUANT® Oil 2.5 test strip is available.



Product Range

Product	Graduation	Presentation	Product Code	Industry
J-QUANT® Oil Quality Test Strips 0-2.5% FFA	0 - 0.25 - 0.5 - 1.0 - 1.5 - 2.0 - 2.5 %FFA	100 strips/pk	244.1	Food Service
J-QUANT® Oil Quality Test Strips 0-6% FFA	0 - 2 - 4 - 6 %FFA	100 strips/pk	245.1	Food Service