



3M Oil Testing strips

Improve food quality,
optimise oil related costs

3M™ Low Range Shortening Monitor

1 Problem

In deep frying operations it is difficult:

- To know when to discard the oil
- To ensure the consistent quality of fried ingredients
- To adhere to legislation and regulations (HACCP)
- To obtain an objective monitoring system
- To get accurate results without waiting for lab's tests

2 3M Quick Solution

The 3M™ Low Range Shortening Monitor (LRSM) can be used in all types of shortening and fryers.

- It is easy to use
- It gives immediate results
- It ensures that you discard the oil at the optimal time, saving unnecessary oil replacement

3 Product Description

The 3M™ LRSM is a paper testing strip with four blue bands.

It measures Free Fatty Acids (FFA) and gives you the degree of the shortening degradation.

It is:

- Very quick: immediate results after direct dipping into hot oil (15-30 seconds)
- Easy to use: no need for staff training



3M™ Low Range Shortening Monitor

Manage your oil consumption and provide consistent quality of fried food with the 3M™ LRSM

How to use the strips?

1. Dip the four blue bands into hot shortening for about 2 seconds
2. Wait 30 seconds for strip to dry
3. Count how many bands have changed from blue to yellow
4. Discard oil in line with local constraints*

Example: 3 bands discoloured (yellow) mean that your oil bath contains 2% FFA

Strip 1

Shortening breakdown has begun. Indicates greater than 1% free fatty acids concentration.**

Strip 2

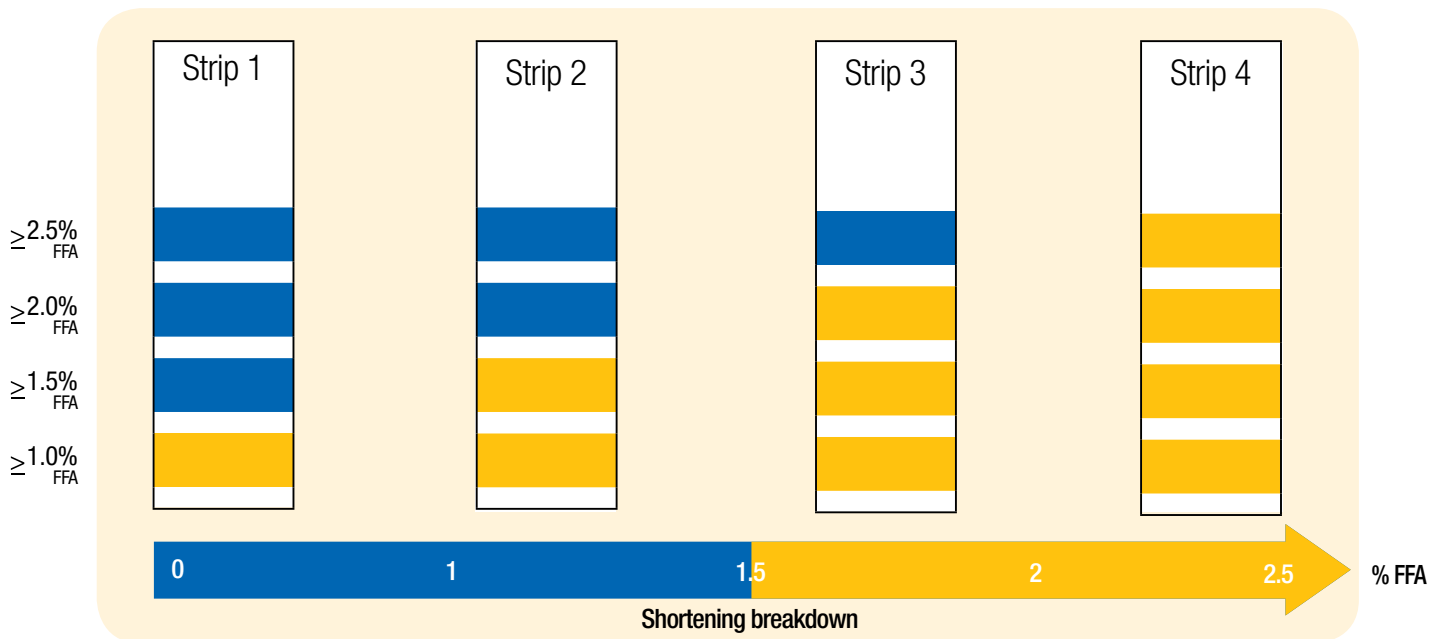
Check breaded food quality (colour/taste, particularly of chicken and fish). Discard shortening if unacceptable. Indicates greater than 1.5% free fatty acids concentration.**

Strip 3

Check fried food quality (colour/ taste, particularly of chicken, fish and French fries). Discard shortening if unacceptable. Indicates greater than 2% free fatty acids concentration.**

Strip 4

Recommend discarding shortening. Indicates greater than 2.5% free fatty acids concentration.**



With 3M™ LRSM you will:

- ✓ Improve the quality of your fried food
- ✓ Sell consistent taste and achieve high Customer Satisfaction
- ✓ Rely on an objective method
- ✓ Keep the right nutritious value

*3M's Laboratory Support can help you to choose the best discard point.

**Free fatty acids concentrations indicated on the Shortening Monitor strip are equivalent to those that can be obtained by A.O.C.S. Official Test Methods Te la-64 and Ca 5a-40.



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