

# 3M™ Oil Quality Test Strips 1004 and 1005

Technical Data

June 2012

## Description:

The 3M™ Oil Quality Test Strips 1004 and 1005 are designed to measure the degree of breakdown of shortening in deep frying vats. The 3M™ Oil Quality Test Strips are designed as a management tool to help determine the correct time to discard the shortening. The test strip is a white paper measuring 0.3 in. x 3.75 in. with four blue bands running across the width of the band.

The test strips come in two versions: Standard Range 1004 and Low Range 1005. Standard range test strips are designed to measure free fatty acid level starting at 2% up to 7% and the Low Range test strips measure 1% to 2.5%.

## Special Features:

- Food safe
- Easy to use, no interruption of frying time
- Can be used at operating temperature of (325°-400°F/163°-204°C)
- Fast result
- Works in all type shortening (vegetable, animal, or vegetable and animal blend)

## Applications:

The 3M™ Oil Quality Test Strips are used to measure the level of free fatty acid (FFA) present in shortening or cooking oil used for deep frying.

The test strips do not measure the level of total polar compounds (TPC) present in shortening or cooking oil.

## Packaging:

The 3M™ Oil Quality Test Strips are packed in plastic bottles.

40 Test Strips/Bottle, 4 Bottles/Case

## General Use Directions:

When the test strip is dipped into a vat of shortening or cooking oil, the blue bands on the test strip will change to a yellow color based on the level of free fatty acid present in the cooking oil. The color change on the bands indicates the level of free fatty acid in the cooking oil.

The test strips are designed for a single use and work best at the following operating temperature ranges: 325°-400°F/163°-204°C.

Test strips are to be used within the expiration date stamped on the bottle.

1. Using tongs, hold test strip by longest white end.
2. Dip test strip into hot oil so all blue bands are submerged.
3. Hold in oil for 5 seconds.
4. Remove strip from shortening.
5. Wait 30 seconds.
6. Hold strip up to the light.
7. Refer and compare strip to Evaluation Guide Chart and follow its recommendations.
8. Throw away used test strip in regular kitchen trash.

## Shipping Instructions:

The 3M™ Oil Quality Test Strips can be shipped without refrigeration or dry ice. Shipping temperature condition cannot exceed 120°F/49°C.

## Storage Instructions:

Keeping test strip bottles tightly closed will prevent strips from exposure to moisture and humidity and will also prolong the life of the test strips.

Everyday use test strips are to be stored in cool or room temperature (70°F/21°C) and away from high moisture and humidity areas. Always keep test strip bottles tightly closed after each use.

Test strips that are to be kept for six months or more are to be stored in refrigerator to prolong the life of the test strips. Keep test strip bottles tightly closed.

## Product Specifications:

(Typical Values)

1. Size:  
Test strip length: 3.75 in  
Test strip width: 0.3 in
2. White paper with four blue bands

## Precautionary Summary:

- Blue color of the test strips will fade and bleed off due to moisture and humidity, if bottles are not tightly closed.
- Blue color of the test strips will fade and turn yellowish due to prolonged exposure of temperature above 120°F/49°C even if bottles are tightly closed.
- Do not use the test strips that are faded, bled off, and/or turning yellowish. This will result in an inaccurate reading.



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