

FAA0030 Product Specifications and QC Procedure

1. General Information

Hydrion® Oil Quality Test Strips (Item # FAA0030) test the content of free fatty acids in frying oil and fat. The presence of free fatty acids is an indicator of oil degradation, and high values can negatively affect the quality of fried foods.

In the food industry and gastronomy, it is important to monitor the quality of frying oil to ensure the best possible taste and safety of the food. High levels of free fatty acids can indicate that the oil needs to be changed to prevent the development of off-flavors and to ensure customer satisfaction. Regular monitoring allows for the determination of the optimal time for an oil change, saving costs and resources.

2. Product Specifications

Hydrion Oil Quality Test Strips are summarized in Table 1.

Table 1: Specifications Hydrion Oil Quality Test Strips

Hydrion® Oil Quality Test Strips	
REF	FAA0030
Measuring range	0.25- 3 % free fatty acids (% FFA) (visual)
Gradations	0 • 0.25 • 0.5 • 1 • 2 • 3 % FFA
Shelf life	2 years
Storage temperature	4 - 30 °C
Delivery content	50 test strips in aluminum tube, package insert

3. Quality Control Procedure

Test solutions are prepared from commercially available frying oil (mostly a mixture of canola, sunflower and corn oil) and oleic acid (acid value = 200) as shown in Table 2. These standards are tested at 72°F and 325° to insure test strip accuracy.

Table 2: Preparation of testing solutions for quality control.

%FFA	0	0.25	0.5	1.0	2.0	3.0
oleic acid amount [g]	0	0.125	0.25	0.5	1.0	1.5
standard oil amount [g]	50	49.875	49.75	49.5	49.0	48.5

Test procedure

Collect oil sample.
Dip the strip into sample for 2 seconds.
Do not shake off excess oil.

For samples at 72°F compare to color chart 5 minutes after dip.
For samples at 325°-375°F compare to color chart 30 seconds after dip.