



NQAC

Nestlé Quality Assurance Center  
Dublin

# Technical Datasheet

**Analysis Name:** Free Fatty Acid by Colorimetry

**Method Number:** LI-00.516

**Scope of Application:** This method is applicable to edible oils and fats, and extracted fat. If a sample has zero fat/oil, it is out of scope for this method.

**Description:** The test portion is diluted in a mixture of ethanol and diethyl ether, then the free fatty acids present are titrated with an ethanolic potassium hydroxide solution in presence of phenolphthalein. The colorimetric indicator allows following the titration according to a pH change (from acid to alkaline).

**Sample Weight Required:** See Special Information (below)

**Method Reference:** ISO 660:2008 - Animal and vegetable fats and oils- Determination of acid value and acidity

**Analytical Platform:** Manual Titration

**Special Information:** If fat extraction is required before testing, 300 g is needed. If the sample can be tested as-is, 25 g.

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
Free fatty acid as Oleic	FFA	g/100 g	0.1	The amount of FFA corresponding to 0.2 mL titrant when <5 mL is used; or 0.50m L titrant when ≥ 5 mL is used.