



NQAC

Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Peroxide Values of Oils and Fats

Method Number: NQA-AOAC-965.33

Scope of Application: This method applies to animal and vegetable oils, fats, and fat extracted from various products. Submitted samples must be either oil/fat or have oil/fat that can be extracted in sufficient amount to test.

Description: The test portion is dissolved in acetic acid and chloroform solution with the addition of potassium iodide solution in the presence of starch. Iodide is oxidized to iodine by the active oxygen (peroxides) in the product. The liberated iodine is titrated with standardized sodium thiosulfate solution.

Sample Weight Required: 25 g if submitting fat/oil. 300 g if fat extraction is required

Method Reference: AOAC 965.33

Analytical Platform: Manual titration

| Analyte Reported | Alias | Unit of Measure | Limit of Quantification | Reproducibility |
|------------------|-------|-------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Peroxide Value | PV | meq O ₂ /kg fat | 0.2 | The level of PV corresponding to 0.2 mL of titrant when <5 mL titrant used, or 0.50 mL titrant when >5 mL of titrant is used. |