1. SCOPE AND PURPOSE:

This method measures peroxide value (milliequivalents of peroxide per kilogram of fat) in fats and oils. There is no assurance that matrices other than those listed can be assayed using this method.

2. PRINCIPLE:

2.1. The sample is dissolved in an acetic acid-chloroform solution. Potassium iodide is added, and is oxidized by any peroxide present, liberating the iodine. The liberated iodine is titrated with standardized sodium thiosulfate, using a starch indicator solution end point. The amount of peroxide is calculated from the volume of titer consumed.

2.2. Using a 5 g sample, the lowest confidence level of this method is 0.2 milliequivalents per killogram of fat.

2.3. Known Interferences - Exposing samples to excessive temperatures during handling and analysis may cause an increase in peroxide content.

3. PRECISION:

Records of method precision based on Method Validation and/or random duplicate sample summaries are located in the QA Master file for this test method. Assay precision may vary with test matrix and analyte level. Terms used to describe method precision are defined in NPSOP3000, *Validation of Quantitative Chemical Tests.*

4. REFERENCES:

Official Methods and Recommendations of the AOCS, Method Cd 8-53, 1998 (Modified)