

EFFECTIVE DATE	N P Analytical Laboratories	
REVISED: 02/21/25	LABORATORY TEST METHOD SUMMARY	ACPF
REPLACES: 12/05/24	TITRATABLE ACIDITY, AS PHOSPHORIC ACID	PAGE 1 OF 1
KEY WORDS: Phosphoric Acid, Acidity, pH		

1. SCOPE AND PURPOSE:

This method measures titratable acidity, calculated as phosphoric acid, in animal feeds and pet foods.

2. PRINCIPLE:

- 2.1. The sample is water extracted and filtered. An aliquot of filtrate is titrated to a pH 9 end-point with dilute sodium hydroxide solution. The quantity of titer is used to calculate percent phosphoric acid in the sample under the premise that all acidity in the sample is a function of phosphoric acid.
- 2.2. Using a sample to water ratio of 1:10, the lowest confidence level of this method is 0.03% phosphoric acid. This lowest confidence level may vary with sample matrix.
- 2.3. Known Interferences:
 - 2.3.1. Any water-soluble acids in the sample will be calculated as phosphoric acid.
 - 2.3.2. Buffered samples cannot be analyzed by this method.

3. PRECISION:

Records of method precision based on Method Validation and/or known control 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:

- 4.1. Official Methods of Analysis of the AOAC International, Method 920.43.
- 4.2. Quality Assurance Test Procedure Q.20.00, NPPC
- 4.3. LI-00.908-1 pH/Acidity: Food/Juices/Tomato/Petfood