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| EFFECTIVE DATE | N P Analytical Laboratories | METHOD CODE |
| REVISED: 11/19/25 | LABORATORY TEST METHOD SUMMARY | MVOS / MVOF |
| REPLACES: 09/10/21 | Moisture, Vacuum Oven | PAGE 1 OF 1 |
| KEY WORDS: Moisture, loss on drying | | |

1. SCOPE AND PURPOSE:

- 1.1. This method measures moisture in dry animal digests, bouillon, dried spice and bouillon mixture, wet baby food, sugars, dessert powders, dried molasses, dried fruits, nuts and nut products not high in preservatives, eggs, food dressings, gelatin, dried milk, dried plant material and products containing significant amounts of these matrices which are not fluid or pasty.
- 1.2. There is no assurance that matrices other than those listed can be assayed using this method.

2. PRINCIPLE:

- 2.1. The sample is dried to a constant weight under a strong vacuum at 70°C (MVOS) or 100 °C (MVOF). The loss in weight is quantitated and calculated as percent moisture.
- 2.2. Using a 5 g sample, the lowest confidence level of this method is 0.1% moisture.
- 2.3. Known Interferences - All materials in the sample which are volatilized at less than or equal to the conditions of the test are calculated as part of the moisture fraction. MVOF matrix is not applicable to samples containing ammonium salts.

| Test Code | Used for determining moisture in | Reference Methods |
|------------------|--|--|
| MVOS | Raw and refined sugars, dried fruits, bouillon, dried spice and bouillon mixture, tomato paste, powder digest, wet baby food, dessert powders, dried molasses, gelatin | Nestle LI-00.502-02, AOAC 925.45, AOAC 934.06 |
| MVOF | Nuts and nut products, eggs, dried milk, dried plant material, food dressings, flour, ground grains, feedstuffs and adjuncts, yeast foods | AACC 44-40.01, AOAC 927.05, AOAC 925.30, AOAC 925.40 |

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. Nestle LI-00.502-02 Moisture & Dry Matter by Vacuum Oven
- 4.2. Official Methods of Analysis of the AOAC International, Method 934.06, and Method 925.45
- 4.3. Official Methods of Analysis of the AACC International, Method 44-40.01