

EFFECTIVE DATE	NP Analytical Laboratories	METHOD CODE
REVISED: 11/19/25	LABORATORY TEST METHOD SUMMARY	MOB, MFDF, M103, M120, M125, M130, M135, MOWE
REPLACES: 02/12/25	MOISTURE, Forced Draft Oven Methods	PAGE 1 OF 2
KEY WORDS: Moisture, Loss on Drying		

1. SCOPE AND PURPOSE:

This method measures moisture determined as loss on drying in foods, feeds, and ingredients. The appropriate oven temperature and drying time are selected based on the composition of the sample to be tested. Values reported as “% moisture” may include loss of sample components that volatilize under the conditions specified for the test.

2. PRINCIPLE:

2.1. Specific test codes are used to indicate conditions for determining loss on drying according to the following table.

Test Code	Used for determining moisture in	Reference Methods
MOB	Feeds (that do not contain appreciable amounts of sugars, preservatives, or urea), plant materials, flours, grains, other products containing less than approximately 20% water and which do not contain large amounts of volatile components other than water, wet pet foods containing > 30% water which do not contain appreciable amounts of sugars, preservatives, or urea	AOAC 930.15, AOAC 925.10, LI-00.500-04
MFDF	Milk, butter, margarine, cream, evaporated or condensed milk, sugars, ice cream, and frozen desserts, marine products (except raw oysters), and products containing significant portions of these materials.	AOAC 920.116, AOAC 941.08, AOAC 952.08, LI-00.500-04
M103	Soy proteins, protein isolates, soy products	Customer specific
M120	Freeze dried pet feces, dry finished product	Customer specific
M125	Raw and processed meat and poultry	AOAC 950.46B, LI-00.500-04
M130	Feeds (that do not contain appreciable amounts of sugars, preservatives, or urea), plant materials, flours, grains, or other products containing less than approximately 20% water	AOAC 930.15, AOAC 925.10, LI-00.500-04
M135	Soybean meal, corn, grains	Customer specific
MOWE	Products containing more than approximately 30% moisture without appreciable amounts of sugar or preservatives; baked products and cereal grain products that do not contain nuts, fruits, or appreciable amounts of sugar; when the products do not contain appreciable amounts of volatile components other than water.	AOAC 930.15, AOAC 925.10, AACCI 44-15A, LI-00.500-04

2.2. Samples containing appreciable quantities of volatile components other than moisture should be tested using other methods, including vacuum oven moisture or moisture by Karl Fischer.

2.3. Using a 5 g sample, the lowest confidence level of this method is 0.1% moisture.

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*.

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4. **REFERENCES:**

See table in 2.1.