

ICS 67.060
CCS B 20



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 9822-2008

Replacing GB/T 9822-1988

**Inspection of grain and oils -- Determination of insoluble
dietary fiber in cereals**

粮油检验 谷物不溶性膳食纤维的测定

(English Translation)

Issued on: November 4, 2008

Implemented on: January 20, 2009

Issued by: Standardization Administration of China

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 5 Reagents and materials

Foreword

This revised standard adopts the American Association of Cereal Chemists AACC method 32-20 (1999), "insoluble dietary fiber" (in English).

32-20 (1999) The main technical differences between this standard and AACC method is as follows.

- Increased the fiber analyzer method;
- Increasing the precision requirements;
- The standard Note 1 Note to modify this standard 5.17.

This standard replaces GB/T 9822-1988 "cereal insoluble dietary fiber determination." this standard and GB/T 9822-1988 main technical differences are as follows.

- Balance weighing accuracy requirements are specified by 0.001g to 0.0001g;

Particle Size --- sample from "all through 1mm ~ 2mm sieve" with "all through 1mm sieve";

- The alpha- amylase predetermined concentration of 2.5%;
- Canceled as a heating process defoamers decahydronaphthalene;
- Increased the fiber analyzer method;
- Modified on precision requirements.

The standard proposed by the National Food Authority.

This standard by the National Standardization Technical Committee OILS.

This standard was drafted. National Food Reserve Chengdu Grain Storage Research Institute.

1 Scope

This standard specifies the determination of terms and definitions cereal insoluble dietary fiber, principle, reagents and materials, equipment, procedures, Junction If calculated, and precision requirements.

This standard applies to the determination of grain insoluble dietary fiber.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 5491 grain and oilseeds testing for sampling, and sample method GB/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-2008, ISO 3696. 1987, MOD)

3 Terms and Definitions

The following terms and definitions apply to this standard.

In the digestion of neutral detergent sample sugar, starch, protein, pectin and other substances can not be dissolved after the removal of digested residue Slag. Including cellulose, hemicellulose, lignin, cutin and silica and insoluble ash.

Principle 4

Grain samples were neutral detergent solution digester, the residue was washed thoroughly with hot water, add alpha- amylase solution to decompose bound residues State starch, and then washed with water, acetone and drying, is insoluble dietary fiber.

5 Reagents and materials

Unless otherwise specified, all reagents were of analytical grade, test water should be consistent with GB/T 6682 in the three water specifications.

5.1

Disodium ethylenediaminetetraacetate (EDTA).

5.2

Sodium tetraborate (borax, $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$).

5.3

sodium lauryl sulfate.

5.4

Glycol - ether.

5.5 0.1mol/L disodium hydrogen phosphate (Na_2HPO_4). Weigh 14.2g of disodium hydrogen phosphate (the Na_2HPO_4) was dissolved in 100mL water.

5.6

phosphoric acid.

5.7 0.1mol/L sodium dihydrogen phosphate (NaH_2PO_4). Weigh 12.0g sodium dihydrogen phosphate (NaH_2PO_4) was dissolved in 100mL of water.

5.8

alpha- amylase. activity of not less than 800A/mg.

Anhydrous sodium sulfite 5.9.

5.10

refined glass fibers.

5.11

petroleum ether. boiling range 30 °C ~ 60 °C.