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

GB/T 5515-2008

Replacing GB/T 5515-1985

**Inspection of grain and oils -- Determination of crude fibre
content in grain -- Method with intermediate filtration**

粮油检验 粮食中粗纤维素含量测定 介质过滤法

(English Translation)

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Foreword

This standard is identical with ISO 6865:2000 "animal feed crude fiber content determination of filtration media" (in English).

For ease of use, the standard ISO 6865:2000 includes the following editorial changes.

--- "This International Standard" be replaced by "this standard";

"," --- With a decimal point instead of a comma as the decimal point, "";

--- Delete foreword international standards;

--- The reference document ISO 6498:1998 is replaced GB/T 20195;

--- Petroleum ether boiling range from the 40 °C ~ 60 °C to 30 °C ~ 60 °C.

This standard is GB/T 5515-1985 "grain and oilseeds testing crude fiber determination" amendments.

The main changes compared to 5515-1985 standard and GB/T as follows.

--- Increased by principle, normative references, terms and definitions, for sampling, sample preparation, semi-automatic method of operation analysis step, precision and test reports.

Since the implementation of this standard replaces GB/T 5515-1985.

Appendix A of this standard is an informative annex.

The standard proposed by the National Food Authority.

This standard by the National Standardization Technical Committee OILS.

This standard was drafted. State Administration of Grain Science Institute.

1 Scope

This standard specifies the determination of crude fiber content in grain by media filtration method step manual and semi-automatic operation.

This standard applies to the determination of crude fiber content higher than 10g of cereals, legumes and animal feed crude fiber content/kg of.

NOTE: If the crude fiber content of not more than 10g/kg, should be performed in accordance with ISO 6541.

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/T 6682 analytical laboratory use specifications and test methods (GB/T 6682-2008, ISO 3696. 1987, MOD) GB/T 20195 preparation of animal feed samples (GB/T 20195-2006, ISO 6498:1998, IDT)

3 Terms and Definitions

The following terms and definitions apply to this standard.

In accordance with the provisions of the standard sample analysis steps, acids and bases after the residue obtained after digestion, drying, ashing again after the loss of part of the account Kind of quality scores.

NOTE: The crude fiber content expressed as g/kg. It can also be expressed by mass fraction (%).

Principle 4

Sample processing with boiling dilute sulfuric acid, the residue was isolated by filtration, washed, treated with potassium hydroxide solution boiling. The residue was treated it was isolated by filtration, washed, dried and weighed, and then ashed. Quality ashing loss corresponds to the quality of the sample of crude fiber.

5 Reagents

Unless otherwise indicated, the reagents used were of analytical grade.

5.1

Water. at least third grade water GB/T 6682 regulations.

5.2

hydrochloric acid solution. Ba (HCl) = 0.5mol/L.

5.3

sulfuric acid solution. Ba (H₂SO₄) = (0.13 ± 0.005) mol/L.

5.4

Potassium hydroxide solution. Ba (KOH) = (0.23 ± 0.005) mol/L.

5.5

acetone.

5.6

Filter Accessories. 545 sea sand or diatomaceous earth, or other material of equivalent quality.

Before use, the sea sand with boiling hydrochloric acid solution [Ba (HCl) = 4mol/L], washed with water until neutral, and then at 500 °C ± 25 °C Heating at least 1h. Other filter materials at 500 °C ± 25 °C heated for at least 4h.

5.7

defoamers. eg n-octanol.

5.8

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

GB/T 5515-2008/ISO 6865:2000