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

GB/T 9695.14-2008

Replacing GB/T 9695.14-1988

**Meat products -- Determination of starch content
(English Translation)**

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Table of Contents

Foreword

1 Scope

2 Normative references

4 Reagents

Foreword

GB/T 9695 consists of the following components.

- GB/T 9695.1 "Meat and meat products - Determination of free fat";
- GB/T 9695.2 "Meat and meat products - Determination of fatty acid";
- GB/T 9695.3 "Meat and meat products - Determination of iron content";
- GB/T 9695.4 "Meat and meat products - Determination of total phosphorus content";
- GB/T 9695.5 "Meat and meat pH measurement";
- GB/T 9695.6 "meat Carmine colorant determination";
- GB/T 9695.7 "Meat and meat products - Determination of total fat content";
- GB/T 9695.8 "Meat and meat products - Determination of chloride content";
- GB/T 9695.9 "Meat and meat products polyphosphate determination";
- GB/T 9695.10 "meat and meat products BHC and DDT residues determination";
- GB/T 9695.11 "Meat and meat products - Determination of nitrogen content";
- GB/T 9695.13 "Meat and meat products - Determination of calcium content";
- GB/T 9695.14 "meat starch content determination";
- GB/T 9695.15 "Meat and meat products - Determination of moisture content";
- GB/T 9695.17 "Meat and meat products - Determination of glucono-lactone -delta-content";
- GB/T 9695.18 "Meat and meat products - Determination of ash";
- GB/T 9695.19 "Meat and meat sampling method";
- GB/T 9695.20 "Meat and meat products - Determination of zinc";
- GB/T 9695.21 "Meat and meat products - Determination of magnesium content";

- GB/T 9695.22 "Meat and meat products - Determination of copper content";
- GB/T 9695.23 "Meat and meat products - Determination of hydroxyproline content";
- GB/T 9695.24 "Meat and meat cholesterol content determination";
- GB/T 9695.25 "Meat and meat products - Determination of vitamin PP";
- GB/T 9695.26 "Meat and meat products - Determination of vitamin A content";
- GB/T 9695.27 "Meat and meat products - Determination of vitamin B1";
- GB/T 9695.28 "Meat and meat products - Determination of vitamin B2";
- GB/T 9695.29 "Meat vitamin C content determination";
- GB/T 9695.30 "Meat and meat products - Determination of vitamin E content";
- GB/T 9695.31 "Meat total sugar content determination." this section GB/T Part of 149,695.

The partial modification of ISO 5554 Implementation. 1978 "Meat starch content determination" (in English).

This part of ISO 5554. 1978 Main technical modifications compared as follows.

- Increase Normative references GB/T 6682-2008 and GB/T 601;
- Reagent water requirement was changed to "shall comply with GB/T 6682-2008 in three water requirements";
- The "standard sodium thiosulfate solution 0.1N" to "0.1mol/L sodium thiosulfate standard solution. According to GB/T 601 Preparation";
- With GB/T 9695.19 instead of ISO 3100-1.

According to GB/T 1.1-2000 "Standardization Guide Part 1. Standard structure and writing rules" and GB/T 20001.4-2001 "Rules for drafting standards - Part 4. Chemical analysis methods" of ISO 1442:1997 main editorial carried by the following.

- Delete ISO 5554. 1978 Foreword;
- With "this Part" instead of "this International Standard";
- By decimal points instead of ISO 5554. 1978 as a decimal point, "";
- The formula increases the number.

This Part replaces GB/T 9695.14-1988 "Determination of starch content of meat." this portion of the GB/T 9695.14-1988 compared to the main changes are as follows.

- According to GB/T 1.1-2000 and GB/T 20001.4-2001 been restructured and editorial changes;

--- Chapter 2 increase Normative references GB/T 6682-2008;

--- Chapter 4, "the reagents were of analytical grade, water is distilled water or equivalent purity" to "unless otherwise specified, the test Agents were of analytical grade, "added the method of preparation portion of the solution, increasing the clause" 4.1 Water. should be consistent with GB/T 6682-2008 the three water requirements ";

--- Chapter 4, "sodium thiosulfate (GB 637). 0.1N standard solution" was changed to "0.1mol/L sodium thiosulfate standard solution.

GB/T 601 was prepared as. ";

--- With "9 Precision" and its contents instead of "9 to allow poor" and its contents;

--- Added "Test Report" chapter.

This part is proposed by the China General Chamber of Commerce.

This part of the National Meat egg products Standardization Technical Committee.

This section is drafted. Shenzhen Academy of Metrology and Quality Inspection, China Chamber of Commerce Business Standard Centre.

1 Scope

GB/T 9695 provisions of this part of the determination of the starch content of meat products.

This section applies to meat products Determination of starch content not suitable for further contain other additives can also be produced by hydrolysis of reducing sugar Determination of starch content.

2 Normative references

The following documents contain provisions which, through reference to GB/T 9695 to the present, constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

Preparation of GB/T 601 chemical reagent standard titration solution GB/T 6682-2008 analytical laboratory use specifications and test methods (ISO 3696. 1987, MOD) GB/T 9695.19 Meat and meat products - Sampling Methods Principle 3 Sample of potassium hydroxide was added - ethanol solution, after heating on a boiling water bath, was separated by filtration, washed with hot ethanol precipitated to remove fat and Soluble sugar, glucose after hydrolysis with hydrochloric acid to precipitate, formed by iodometric

method for the determination and calculation of the starch content.

4 Reagents

Unless otherwise specified, the reagents were of analytical grade.

4.1

Water. should be consistent with GB/T 6682-2008 in three water requirements.

4.2

Potassium hydroxide - ethanol solution. Weigh potassium hydroxide 50g, with 95% ethanol dissolved and diluted to 1000mL.

4.3 80% ethanol solution. amount of 95% ethanol 842mL, diluted with water to 1000mL.

4.4 1.0mol/L hydrochloric acid solution. an amount hydrochloride 83mL, diluted with water to 1000mL.

4.5

Sodium hydroxide solution. Weigh solid sodium hydroxide 30g, dissolved in water and diluted to 100mL.

4.6

protein precipitant.

a) Solution A. Weigh ferricyanide 106g, dissolved in water and diluted to 1000mL.

b) Solution B. Weigh 220g of zinc acetate, dissolved in water, glacial acetic acid was added 30mL, diluted with water to 1000mL.

4.7

alkaline copper reagent.

Solution a. Weigh copper sulfate ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$) 25g, was dissolved in 100mL of water.

Solution b. sodium weighed 144g, was dissolved in water of 300mL ~ 400mL 50 °C.

Solution c. Weigh citric acid ($\text{C}_6\text{H}_8\text{O}_7 \cdot \text{H}_2\text{O}$) 50g, was dissolved in 50mL water.

The solution was slowly added to the solution b, c, with stirring until bubbles stop producing. This solution was added to a mixture and stir continuously Mixed, cooled to room temperature, transferred to a 1000mL volumetric flask, dilute to volume, and mix. After 24h place using, if required precipitate filter.

Take one part of this solution was added 49 parts of boiled and cooled distilled water, pH should be 10.0 ± 0.1 .