

ICS 67.180.20
CCS X 11



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

GB/T 22427.1-2008

Replacing GB/T 12086-1989

Starch -- Determination of ash

淀粉灰分测定

(English Translation)

Issued on: October 19, 2008

Implemented on: March 1, 2009

Issued by: Standardization Administration of China

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 5 Instruments
- 6 Operation
 - 6.1 Crucible pretreatment
 - 6.2 Said sample

Foreword

This standard is identical with ISO 3593. 1981 "starch ash determination" (in English), the content and structure of ISO 3593. 1981 Consistent, only made editorial changes.

This standard replaces GB/T 12086-1989 "starch ash determination." this standard and GB/T 12086-1989 compared to major changes are as follows.

- Standard name changed to "Starch - Determination of ash";
- Improve the standard format, according to the International System of Units standardized units;
- According to the ash content of the sample is different from a clear sample weight of the sample;
- Added "8 Experiment Report";
- Added "References." this standard is proposed and managed by China General Chamber of Commerce.

This standard was drafted. Chinese Chamber of Commerce Business Standard centers, food, Jiangnan University, China Starch Industry Association modified starch Professional Committee, Tianjin peak Starch Development Co., Ltd. Yunnan Runkai starch.

1 Scope

This standard specifies the method for the determination of starch ash.

This standard applies to the ash content of not more than 2% of starch and modified starch, does not apply to the hydrolysis products, and the chlorine content of oxidized starch the

mass fraction of more than 0.2% (sodium chloride meter) sample. The remaining cases see GB/T 22427.8.

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 22427.2 starch Moisture (GB/T 22427.2-2008, ISO 1666:1996, IDT)

3 Terms and Definitions

The following terms and definitions apply to this standard.

The method according to this standard, the samples obtained after ashing residue.

Principle 4

The sample was ashed at 900 °C, carbon ashing until complete disappearance of the sample, the sample to obtain a residue.

5 Instruments

5.1

Crucible. made of platinum or under the assay conditions affected material, flat with a capacity of 40mL, the minimum usable surface area 15cm².

There are plenty of valid within the desiccant and a thick porous plate. 5.2 dryer.

5.3

ashing furnace. for control and temperature control device that provides 900 °C ± 25 °C ashing temperature.

5.4

Analysis of balance. a sense of the amount of 0.0001g.

5.5

Bunsen burner or electric hot plate.

6.1 Crucible pretreatment

Whether new or used crucible (5.1), must be washed with dilute hydrochloric acid and boiling, and then a lot of water washing, and finally with distilled Distilled water.

Wash the crucible placed in ash oven (5.3) inside at $900\text{ }^{\circ}\text{C} \pm 25\text{ }^{\circ}\text{C}$ burn 30min, and cooled to room in the dryer (5.2) in the Temperature, weighing, accurate to 0.0001g.

6.2 Said sample

According to the ash content of the sample estimate, quickly weighed sample 2g ~ 10g, accurate to 0.0001g, uniform distribution of the sample in the crucible Inside, do not pinch.

NOTE: potato starch, wheat starch and rice starch, said at least 5g, while corn starch and tapioca starch need to weigh 10g.

GB/T 22427.1-2008/ISO 3593. 1981