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SN

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

SN/T 1405-2004

**Inspection of 10-hydroxy- ω -decanoic acid in bee products for
import and export. Capillary electrophoresis method**

进出口蜂产品中10-羟基- α 癸烯酸的检验方法 毛细管电泳法

(English Translation)

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Foreword

Appendix A of this standard is an informative annex.

This standard is proposed and managed by the National Certification and Accreditation Administration.

1 Scope

This standard specifies sampling, sample preparation and capillary electrophoresis testing of 10-hydroxy-alpha-decenoic acid (10-HDA) test in import and export bee products.
method.

This standard applies to the test of 10-hydroxy-alpha-decenoic acid (10-HDA) in the import and export royal jelly and royal jelly lyophilized powder.

2.1 Inspection lot

The royal jelly is not more than 1000kg for one inspection lot, and the royal jelly lyophilized powder is not more than 250kg for one inspection lot.

The same inspection batch should have the same characteristics, such as packaging, marking, origin, specifications, grades, etc.

2.2 Number of samples

The number of samples is shown in Table 1.

Table 1 is a unit

Batch sampling

1 to 50 5

51~100 7

>100 10

2.3 Sampling and sample preparation methods

Randomly extract the number of samples according to 2.2, open one by one, and take one can (bag) from each piece as the original sample, mix the sample after mixing Divided into two equal parts, each serving not less than 20g. After the seal is sealed, the mark is marked, one is retained, and the other is sent to the laboratory in time. In sampling and sample preparation the sample must be protected from contamination and changes in the amount of the product during the operation.

2.4 Sample storage

The sample was stored frozen below -18 °C.

3.1 Method summary

Under acidic conditions, the 10-HDA in the sample is extracted with ethanol. After centrifugation, the supernatant is mixed with the buffer and then subjected to capillary electrophoresis.

The instrument was measured and quantified by the internal standard method.

3.2 Reagents and materials

Unless otherwise specified, the reagents were of analytical grade and the water was deionized water.

3.2.1

Anhydrous ethanol. excellent grade pure.

3.2.2

Hydrochloric acid solution. 0.03 mol/L aqueous solution.

3.2.3

Internal standard. methylparaben, content 99.0%.

3.2.4

Internal standard solution. Take about 0.65g of dried methylparaben (accurate to 0.0002g), dissolve and shift with absolute ethanol.

In a 1000 mL volumetric flask, dilute to the mark with absolute ethanol and shake well. This solution contains about 0.65 mg per ml of internal standard.

3.2.5

Sodium dodecyl sulfate (SDS).

3.2.6

sodium tetraborate decahydrate (sodium tetraborate).