

ICS 65.120
CCS B 46



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

GB/T 19371.2-2007

Replacing GB/T 19371.2-2003

**Feed methionine hydroxy analogue HPLC
(English Translation)**

Issued on: January 1, 1970

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Foreword

This standard is GB/T 19371.2-2003 "feeds liquid MHA High performance liquid chromatography" repair Revised edition.

This standard and GB/T 19371.2-2003 main differences are as follows.

--- To modify the standard name from the "feed liquid MHA determination" to "feed MHA Determination. "

--- To modify the measurement range, an increase in the scope of the determination of methionine hydroxy premix of calcium.

--- On the result of the calculation modified by the addition of methionine hydroxy formula of calcium.

--- The minimum detectable amount of specification limit of quantification.

From the date of implementation of this standard instead of GB/T 19371.2-2003.

The standard proposed by the People's Republic of China Ministry of Agriculture.

This standard by the National Standardization Technical Committee of the feed industry.

This standard was drafted. National Feed Quality Supervision and Inspection Center (Beijing).

1 Scope

This standard specifies a high performance liquid chromatography (HPLC) determination of compound feed and feed concentrates in liquid MHA and complexes Feed, concentrated feed and feed additive method of calcium hydroxy methionine premix.

This standard applies to the determination of compound feed and feed liquid MHA concentrates, also applicable to compound feed, concentrated feed and feed additive premix Determination of calcium hydroxy methionine.

The standard limit of quantification was 0.03%.

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.

Laboratory use specifications and test methods GB/T 6682 Analysis GB/T 14699.1 feed samples GB/T 19371.1-2003 feed additive liquid MHA Principle 3 the sample was extracted MHA with 10% acetonitrile in water with potassium hydroxide hydrolysis of the MHA have Reactive monomers, phosphoric acid to adjust the pH of the hydrolyzate. Determination of Methionine Hydroxyl phase high performance liquid chromatography, UV detector at 214nm Analogues content. By the MHA content can be converted from hydroxy methionine content of calcium.

4 Reagents

The following reagents used, unless otherwise stated are gifted class pure reagents, water comply with GB/T 6682 a water use.

4.1

acetonitrile. chromatography.

4.2

Extraction solvent. 10% aqueous acetonitrile.

4.3

Potassium hydroxide solution. 50%.

Phosphoric acid 4.4. 1 + 1 (volume ratio).

4.5

HPLC mobile phase. 5% acetonitrile in water, was added 0.5mL of trifluoroacetic acid per liter.

4.6

MHA standard sample. standard purchase unless otherwise basis having GB/T 19371.1-2003 accurate determination.

5 Equipment

5.1

Oscillator. horizontal oscillation frequency 250r/min ~ 300r/min.

5.2

ultrasonic bath.

5.3

HPLC system consisting of the following components.

5.3.1

UV detector, measured at 210nm suitable place.

5.3.2

Analysis Column. packed with a particle size of 5 μ m C18 bonded silica gel column or equivalent other analytical column. The column temperature was room temperature.