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

GB/T 11436-2012

Replacing GB 11436-1989

**Chemical analysis methods for products and semi-finished
products made of soft ferrite materials**

软磁铁氧体材料成品、半成品化学分析方法

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Foreword

This standard rule according to GB/T 1.1-2009 given draft. This standard replaces GB/T 11436-1989 "finished products for chemical analysis of ferrite materials." This standard compared with GB/T 11436-1989, the main changes are as follows:

- Increase the "scope" and "normative references."
- Original standard 1.3.2 "chrome black T indicator. 10%" to 4.4.2 "indicator chrome black T. 1%."
- Conduct of formula (6) was amended (see 4.5 4, 1989 edition of 4.4.4).
- Original standard 4.5.1 "orange chromium ions formed" to 5.6.1, "coordination compound."
- The symbol of each formula element contents are represented by Xi said the number of standard clauses were re-arranged.
- Ni, Cu and Zn increased, Cu, Zn, Mg, Cu, Zn, Ni main component magnesium, manganese, magnesium, copper-zinc and other materials analysis.
- Increased component analysis of normal impurities added to the SiO₂ material.
- Delete the original standard "aluminum reduction process" and the "determination of manganese." The standard proposed by the Ministry of Industry and Information Technology of the People's Republic of China. This standard by the national magnetic components and ferrite materials Standardization Technical Committee (SAC/TC89) centralized. This standard was drafted. Composite Materials Co., Ltd. Zhejiang Chunhui. The main drafters of this standard. Luming Yue, Chen Junqing, Han Guohua, Gu Lijun. This standard replaces the standards previously issued as follows:
- GB/T 11436-1989. Soft ferrite materials, semi-finished Methods for chemical analysis

1 Scope

GB/T 11436-2012 is the Chinese national standard on chemical analysis methods for products and semi-finished products made of soft ferrite materials, in the field of electrical engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 31

December 2012 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 June 2013. Classification: ICS 29.030, CCS L19. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the ferrite materials, semi-finished chemical analysis. This standard applies to ferrite material Mn-Zn ferrite material, nickel-zinc ferrite material, nickel, copper-zinc ferrite material, magnesium (Cu) Zinc Ferrite material, zinc ferrite materials, chemical analysis of nickel-zinc ferrite material magnesium (Cu), manganese, magnesium (Cu).

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated edition applies to this article Member. For undated references, the latest edition (including any amendments) applies to this document. Preparation of

GB/T 601-2002 Chemical reagents Titration standard solution Determination of

GB/T 602-2002 Chemicals impurity standard solution prepared by

GB/T 603-2002 Chemicals in test methods - Preparations with

GB/T 6682-2008 analytical laboratory use specifications and test methods

3 Reagents and water

Test methods used in the reagents and water, did not indicate when the other requirements, refer to analytically pure reagents and GB/T 6682-2008 specified The water used in the test standard titration solution, impurity standard solution, preparations and products, did not indicate when the other requirements, according GB/T 601-2002, regulations preparation GB/T 602-2002, GB/T 603-2002 of.

4 Mn-Zn ferrite material analysis

4.1 Preparation of sample solution 1g sample weighed (accurate to 0.0002g), placed in 250mL beaker, add hydrochloric acid (1.1) 30mL, heated to dissolve, cooled But later, moved into 200mL volumetric flask, dilute with water to volume, mix and set aside. This is solution A.

4.2 Determination of iron

4.2.1 Method summary With stannous chloride reduction of ferric ion to ferrous ion, high

mercury chloride was added to remove excess stannous chloride, sodium diphenylamine sulfonate as Indicator, titrated with standard potassium dichromate solution.

4.2.2 Reagents and solutions The reagents and solutions shall meet the following requirements.

a) hydrochloric acid, a 1. 1;

b) Stannous chloride solution. 10%; Weigh 10g of stannous chloride dissolved in 10mL hydrochloric acid ($\rho = 1.19\text{g/cm}^3$, ρ is the density, the same below)