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

GB/T 17803-2015

Replacing GB/T 17803-1999

Designation system for rare earth products

稀土产品牌号表示方法

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Quarantine;
Standardization Administration of the PRC**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 17803-1999 "rare earth products grades that way." This standard compared with GB/T 17803-1999, the main technical changes are as follows:

- Increasing the normative references (see Chapter 2);
- Added new product grades that way (see Chapter 3). This standard by the National Standardization Technical Committee of rare earth (SAC/TC229) and focal points. This standard is drafted by: Jiangyin Jiahua Advanced Material Resources Co., Ltd, China North Rare Earth (Group) Hi-Tech Company, Technical and Economic Research Institute of Nonferrous Metals. Participated in the drafting of this standard. Baotou Rare Earth Research Institute, Institute of Rare Earth New Materials Co., Ltd. Qiandong Rare Earth Group Company Limited Secretary, Xiamen Topstar New Materials Co., Ltd. Inner Mongolia XiAoKe hydrogen storage alloy, Gansu Rare Earth New Materials Co., Ltd., Kunming Your research catalyst limited liability company, the Steel Research Institute of Functional Materials. The main drafters of this standard. Xie Jianwei, Xiao Rui OF ADMINISTRATIVE Xu Tao, Yan Huizhong, Liu Zheng, Xie Ping, Nam Hung Yao, Luan Chau, Ko Lanta, Xianghong Wang, Wei Lan, Zhuming Gang, Wang Qiao, Yangdong Xia, Wang Changchun, Ji Liqiang, Zhou Xiaodong, Chen Yan, Jin Yanhua. This standard replaces the standards previously issued as follows:

- GB/T 17803-1999. Rare earth products grades representation

1 Scope

China's national designation system for rare earth products - the rules by which the grade of a rare earth oxide, salt, metal or alloy is written down, in a country that supplies most of the world's rare earths and where a purchase order that names a grade ambiguously can be filled with the wrong material. The standard specifies the method of designating rare earth products, and it applies to the designation of rare earth products in their trade, their production and their technical documentation. A rare earth designation has to carry more information than an ordinary material grade, because the elements are sold in a continuum

of purities and in mixtures, and the same nominal product can differ in the ways that matter to the buyer. The system therefore encodes, in a defined order, the chemical form of the product - oxide, chloride, carbonate, fluoride, metal, alloy - the element or the combination of elements it contains, the purity expressed as the fraction of the named rare earth in the total rare earth content and as the total rare earth content itself, and the further characteristics that distinguish grades within a purity, such as the limits on the individual non-rare-earth impurities and on the neighbouring lanthanides that are the hardest to separate and therefore the real measure of the product. The standard sets the symbols, the order of the fields, the way the numbers are written, and the rules for the mixed and the enriched products, and it revises the 1999 edition it replaces on several technical points. It is the document that lets a specification, an invoice and a certificate of analysis refer unambiguously to the same material. Issued on 11 September 2015 and in force since 1 April 2016, it replaces GB/T 17803-1999.

This standard specifies the rare earth minerals, a single rare earth compounds, mixed rare earth compound, a single rare earth metal, mixed rare earth metals, rare earth Alloys, rare earth permanent magnetic materials, rare earth hydrogen storage materials, rare earth luminescent materials, polishing powder, terbium, dysprosium iron magnetostrictive materials, rare earth magnetic refrigeration materials, Rare earth catalytic materials, rare earth and other rare earth products heating material grades that way. This standard applies to rare earth minerals, a single rare earth compounds, mixed rare earth compound, a single rare earth metal, mixed rare earth metals, rare earth Alloys, rare earth permanent magnetic materials, rare earth hydrogen storage materials, rare earth luminescent materials, polishing powder, terbium, dysprosium iron magnetostrictive materials, rare earth magnetic refrigeration materials, Rare earth catalytic materials, rare earth and other heating material grades that rare earth products.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document. GB/T 15676 RE term

3 Terms and Definitions

GB/T 15676 and defined by the following terms and definitions apply to this document. For ease of use, repeat the following list GB/T 15676 Some terms and definitions.

3.1 Grades product designation For convenience, a specific pattern to work out letters to the uniqueness of the product, such as production, trade and management, according to the Code Roughly determine the product variety, quality, grade or size.

3.2 Composition numerical designation grades It is given by the meaning of certain letters, numbers and characters, as an expression of product brands.

3.3 Single rare earth compound individual rare earth compound One rare earth or rare earth-containing compound of the general term rare earth oxides with an acid or a base effect generated.

3.4 Mixed rare earth compound mixed rare earth compound Two or more rare earth or rare earth-containing compound of the general term rare earth oxides with an acid or a base effect generated.

3.5 Rare earth rare earth metal Usually one or more compounds of rare earth as raw material, molten salt electrolysis, metal thermal reduction or other methods to obtain a metal General.

3.6 Single rare earth individual rare earth metal With a compound of a rare earth elements as raw materials, molten salt electrolysis, metal thermal reduction or other methods to obtain metal.