

ICS 77.120.99

CCS H65



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

GB/T 12144-2009

Replacing GB/T 12144-2000

Terbium oxide

氧化铽

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Quarantine of the People's Republic of China;
Standardization Administration of China**

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Foreword

This standard replaces GB/T 12144-2000 "terbium oxide." This standard compared with GB/T 12144-2000, the main changes are as follows:

- Remove purity of not less than 99% of the grade;
- Increasing the purity of not less than 99.999% and 99.995% of the grade, the rare earth impurities assessment indicators were used to "weight" and "co-amount" Representation;
- Adjusted 091,040 in grade ferric oxide, calcium oxide, assessment indicators chlorine ions. This standard by the National Standardization Technical Committee rare and centralized. This standard by the Jiangyin Jiahua Advanced Material Resources Co., Ltd. is responsible for drafting. This standard by Guangdong Zhujiang Rare Earth Co., Ltd., Institute of Rare Earth New Materials Co., Ltd. participated in the drafting. The main drafters of this standard. OF ADMINISTRATIVE Xie Jianwei, Xiao Rui, Jin Yanhua, Zhang Yaojing. This standard replaces the standards previously issued as follows:
- GB/T 12144-1989, GB/T 12144-2000. Terbium oxide

1 Scope

GB/T 12144-2009 is the Chinese national standard on terbium oxide, in the field of metallurgy. 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 23 April 2009 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 February 2010. Classification: ICS 77.120.99, CCS H65. 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 requirements for terbium oxide products, test methods, inspection rules and signs, packaging, transportation and storage. This standard applies to chemical method were terbium oxide, for the production of fluorescent materials, metal terbium, optical glass, magnetic materials and other purposes.

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 8170 numerical rounding rules

GB/T 12690 (all parts), oxides of rare earth metals and their chemical impurity analysis of Central Africa Determination of

GB/T 14635 method for chemical analysis of rare earth metals and rare earth compound total

GB/T 18115.8 rare earth metals and oxides of rare earth impurities in chemical analysis methods terbium lanthanum, cerium, praseodymium, neodymium, samarium, europium, gadolinium, Determination of terbium, dysprosium, holmium, erbium, thulium, ytterbium, lutetium and yttrium content Determination of

GB/T 20170.1-2006 physical properties of metals and their compounds determination of particle size distribution of the rare earth compound

3 CaO SiO

2 Cl- Loss on ignition, not more than 99.0 99.999 0.00005 0.00005 0.00005 0.00005 0.00005 0.00005 0.00005 0.00005 0.00005 0.0001 0.0002 0.00005 0.00005 0.0003 0.001 0.003 0.01 1.0 99.0 99.0 99.995

99.99 The remaining amount together

0.001 The remaining amount together 0.002 0.001 0.002 0.001 0.002 0.001 0.002 0.0005 0.001 0.0005 0.001 0.0003 0.0005 0.001 0.002 0.003 0.003 0.01 0.02 1.0 1.0 99.0 99.0 99.0 99.95 99.9 99.5 0.05 (Eu₂O₃ + Gd₂O₃ + Dy₂O₃ + Ho₂O₃ + Y₂O₃) together amount 0.1 (Eu₂O₃ + Gd₂O₃ + Dy₂O₃ + Ho₂O₃ + Y₂O₃) together amount 0.5 (Eu₂O₃ + Gd₂O₃ + Dy₂O₃ + Ho₂O₃ + Y₂O₃) together amount 0.002 0.003 0.005 0.005 0.005 0.01 0.01 0.01 0.02 0.04 - - 1.0 1.0 1.0