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

GB/T 26018-2021

Replacing GB/T 26018-2010

High purity cobalt

高纯钴

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Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules of Standardization Documents" drafted: This document replaces GB/T 26018-2010 "High Purity Cobalt": Compared with GB/T 26018-2010, except for structural adjustments and editorial changes In addition, the main technical changes are as follows:

- a) Changed the product classification, changed the grades HPCo-1 and HPCo-2 to HPCo-6N, HPCo-5N (see Chapter 4,:2010 edition) 3:1);
- b) The chemical composition requirements have been changed, and the total content requirements of the main control impurity elements have been changed to the specific requirements and sums of the content of each element Requirements (see 5:1, 3:2 of the:2010 edition);
- c) Changed the basic dimensions of the product, changing the "block: length x width: (50 x 50) mm $\pm$ 1 mm, (100 x 100) mm $\pm$ 1 mm; thickness: (3 $\pm$ 2)mm" and "Product size can also be tailored according to user requirements" changed to "High-purity cobalt should be in strip or block shape: The size is determined according to the requirements of the purchaser" (see 5:2, 3:3 of the:2010 edition);
- d) Changed the appearance quality requirements, and changed "the surface of the product is smooth and clean, without electrolyte, oil, etc:" to "high-purity cobalt should have metallic light: The surface is clean and tidy, free of oil stains and attachments, and no through-hole pores" (see 5:3:1, 3:4:1 of the:2010 edition);
- e) Added the provisions for protrusions on the product surface (see 5:3:2);
- f) The test method has been changed, and the "measurement of impurity elements in high-purity cobalt shall be carried out by the method in Appendix A, or shall be determined through negotiation between the supplier and the buyer: "Confirmation" was changed to "Determination of high-purity cobalt impurity element content shall be carried out in

accordance with the provisions of YS/T 1011" (see 6:1, 4:1 of the:2010 edition);

g) increase the measurement of the size of surface protrusions (see 6:3);

h) Changed sampling and sample preparation, changed the "chemical composition arbitration sampling method, randomly selected three products, and cut out a Appendix A Analysis Requirements Sample" is changed to "Sample for chemical composition analysis: randomly cut no less than two samples from the product with shearing equipment: Block samples" (see 7:4:1, 5:3:1 of the:2010 edition);

i) Appendix A was deleted (see Appendix A of the:2010 edition): Please note that some content of this document may be patented: The issuing agency of this document assumes no responsibility for identifying patents: This document is proposed by China Nonferrous Metals Industry Association: This document is under the jurisdiction of the National Nonferrous Metals Standardization Technical Committee (SAC/TC243): This document is drafted by: Jinchuan Group Co., Ltd., Lanzhou Jinchuan Science and Technology Park Co., Ltd., Youyan Yijin New Materials Co., Ltd., Gansu Jingpu Testing Technology Co., Ltd., Ningbo Jiangfeng Electronic Materials Co., Ltd., Shandong Youyan New Material Technology Co., Ltd: The main drafters of this document: Lv Jinlei, Yang Xiaoyan, Hu Jiayan, Cao Dumeng, Bai Yanli, He Xin, Wu Chuanmei, Yao Lijun, Zhang Yadong, Feng Xiaorui, Li Kai, Xiong Xiaodong, Li Wei, Cao Huanhuan, Wei Limei, Qiu Ping, Gan Kejun, Yang Kailin, Liu Dan, and Jing Xiande: This document was first published in:2010 and this is the first revision: High purity cobalt

1 Scope

GB/T 26018-2021 is the Chinese national standard on high purity cobalt, 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 31 December 2021 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 July 2022. Classification: ICS 77.150.70, CCS H62. 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 document specifies the product classification, technical requirements, test methods, inspection rules, marking, packaging, transportation, storage and accompanying documents of high-purity cobalt and the contents of the order form: This document applies to electrolytic or electrolytic deposition of high-purity cobalt for sputtering targets and ion-coating, high-purity reagents, and high-performance alloys:

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, dated citations documents, only the edition corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document:

GB/T 8170 Numerical Rounding Rules and Representation and Judgment of Limit Values
YS/T 1011 High-purity Cobalt Chemical Analysis Method Determination of Impurity
Element Content Glow Discharge Mass Spectrometry

3 Terms and Definitions

There are no terms and definitions that need to be defined in this document:

4 Product categories

High-purity cobalt is divided into two grades according to cobalt content: HPCo-6N and HPCo-5N:

5 Technical requirements

1 Chemical composition The chemical composition of high-purity cobalt should meet the requirements in Table 1: Table

1 Chemical composition of high-purity cobalt Grade HPCo-6N HPCo-5N Co content a (mass fraction)/%, not less than 99:9999 99:999 Impurity content (mass fraction)/ 10-4%, not more than Ag 0:10 0:

80 Au 0:01 0:02 B 0:01 0:02