

ICS 77.150.40
CCS H 62



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

GB/T 6516-2025

Replacing GB/T 6516-2010

Electrolytic nickel

电解镍

Issued on: March 28, 2025

Implemented on: October 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

Foreword	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Classification	5
5 Technical requirements	6
6 Test methods	7
7 Inspection rules	7
8 Marking, packaging, transportation, storage and accompanying documents	8
9 Order form contents	10

Foreword

This document was drafted in accordance with the rules given in GB/T 1.1-2020 "Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents".

This document replaces GB/T 6516-2010 "Electrolytic Nickel". Compared with GB/T 6516-2010, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) Changed product classification. Added Ni9997 to the classification by chemical composition. Added content for classification by physical specifications (see Chapter 4 of this Edition; 3.1 of Edition 2010);
- b) Changed requirements for some impurity elements in Ni9996 and Ni9999. Added requirements for Al and Mn to Ni9996. Modified the requirements for P, Cd, Sn, Al, and Mn in Ni9999 (see 5.1 of this Edition; 3.2 of Edition 2010);
- c) Added the chemical composition and appearance quality requirements of Ni9997 (see 5.1 and 5.2.2 of this Edition);
- d) Changed the inspection and acceptance rules (see 7.1.2 of this Edition; 5.1.2 of Edition 2010);
- e) Changed the batch content. Added the requirements on batch weight (see 7.2 of this Edition; 5.2 of Edition 2010);
- f) Changed the requirements for packaging, marking, transportation, and storage.

Deleted the quality certificate. Added accompanying documents (see Chapter 8 of this Edition; Chapter 6 of Edition 2010);

g) Changed the content of the order (see Chapter 9 of this Edition; Chapter 7 of Edition 2010).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. The issuing authority shall not be held responsible for identifying any or all such patent rights.

This document was proposed by China Nonferrous Metals Industry Association.

This document shall be under the jurisdiction of National Technical Committee on Nonferrous Metals of Standardization Administration of China (SAC/TC 243).

The drafting organizations of this document. Jinchuan Group Co., Ltd., Jilin Jinen Nickel Industry Co., Ltd., Zhejiang Huayou Cobalt Co., Ltd., Zhongwei New Materials Co., Ltd., Jingmen GEM New Materials Co., Ltd., and Nonferrous Metals Technology and Economics Research Institute Co., Ltd.

Main drafters of this document. Zhang Benjun, Chen Shengli, Wu Ruiling, Sun Zhizhong, Yu Yingdong, Li Gaibian, Yang Guiyan, Wu Shuaijin, Yan Ganggang, Wang Rongxiang, Wang Yan, Fei Hongguo, Liu Fengmei, Xiao Chao, Xu Kaihua, Feng Jianhua, Zhou Hairong, Zhao Chaoyue, Ni Jiancheng, Tan Shirong, Wei Qiong, Yang Zekang, Duan Changde, Ma Ting, Sun Rui.

This document was first published in 1986 as GB/T 6516-1986. It was first revised in 1997 and second revised in 2010. This is the third revision. Electrolytic nickel

1 Scope

This document specifies the classification, technical requirements, test methods, inspection rules, marking, packaging, transportation, storage and accompanying documents and order contents of electrolytic nickel (including electrodeposited nickel) products.

This document applies to electrolytic nickel for general purposes such as stainless steel, nickel-based alloys, alloy steel and electroplating.

2 Normative references

GB/T 8170

GB/T 8647

GB/T 26022

3 Terms and definitions

There are no terms or definitions that require definition in this document.

4 Classification

4.1 The product is divided into six designations according to chemical composition.

Ni9999, Ni9997, Ni9996, Ni9990, Ni9950 and Ni9920.

NOTE. Ni9950 and Ni9920 can be amorphous electrolytic nickel products.

5.1 Chemical composition

The chemical composition of the product shall comply with the requirements of Table 1.

5.2 Appearance quality

5.2.1 The product surface and interlayer shall be clean, free of sludge, oil, electrolyte, etc.

6.1 The chemical composition of the product shall be determined in accordance with

the provisions of GB/T 8647 (all parts).

7.1 Inspection and acceptance

7.1.1 The products shall be inspected by the supplier or a third party. The product quality shall comply with the provisions of this document and the purchase order.

7.2 Batching

Products shall be submitted for inspection in batches. Each batch shall consist of products of the same designation produced in the same circulation system and production cycle. The weight of each batch shall not exceed 200 t.

7.3 Inspection Items

Each batch of products shall be inspected for chemical composition and appearance quality.

7.5 Determination of inspection results

7.5.1 The numerical value of the inspection results shall be rounded off according to the provisions of GB/T 8170. The rounded value comparison method shall be used for judgment.

8.1.1 Product marks

The product marks shall be embossed in the middle of the surface of each large board product.

8.2 Packaging, transportation and storage

8.2.1 Large plate products shall be tied firmly and securely with steel straps and packaged into bundles suitable for loading and unloading weight.

8.3 Accompanying documents

Each batch of products shall be accompanied by accompanying documents, which shall include supplier information, product information, reference to this document, exit- factory date or packaging date, and shall also include.

9 Order form contents

The purchaser may, according to his own needs, list the following in the order form for the products listed in this document.