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

GB/T 13397-2024

Replacing GB/T 13397-2008

**Technical specification for silver-metaloxide electrical contacts
by alloy internal oxidation method**

合金内氧化法银金属氧化物电触头技术规范

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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 for standardization documents" Drafting. This document

replaces GB/T 13397-2008 "Technical Specifications for Silver Metal Oxide Electrical Contacts by Internal Oxidation of Alloys" and is in compliance with GB/T 13397-2008. In addition to structural adjustments and editorial changes, the main technical changes are as follows: Deleted some terms and definitions (see

3.4 of the.2008 edition);

a) The burr height index of the appearance has been changed (see 4.1, 4.1 of the.2008 edition);

b) Added technical indicators of pre-oxidation silver metal oxide electrical contacts (see Table 1 and Table 2);

c) Added technical indicators of internal oxidation method silver cadmium oxide (17), silver cadmium oxide (20), silver zinc oxide (12) (see Table 1, Table 2);

d) Deleted other requirements for metallographic structure (see 4.6 of the.2008 edition);

e) The metallographic structure test method has been changed (see 5.5, 5.5 of the.2008 edition);

f) The sampling plan and determination rules for hardness and metallographic structure have been changed (see 6.4.4, Table 4, and 6.4.4, Table 3 of the.2008 edition);

g) The sampling plan and determination rules for chemical composition, density and resistivity have been modified (see 6.4.3, Table 3,

6.4.3 of the.2008 edition);

1 Scope

GB/T 13397-2024 is the Chinese national standard on technical specification for silver-metaloxide electrical contacts by alloy internal oxidation method, 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 26 October 2024 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2025. Classification: ICS 29.120.99, CCS K14. 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 alloy internal oxidation process (including internal oxidation process and pre-oxidation process) manufactured by silver cadmium oxide, silver zinc

oxide, silver oxide Requirements, inspection rules, marking, packaging, transportation and storage of copper and other silver metal oxide sheet electrical contacts (hereinafter referred to as "electrical contacts") The corresponding detection method is described. This document is applicable to silver metal oxide sheet electrical contacts such as silver cadmium oxide, silver zinc oxide, silver copper oxide, etc. manufactured by alloy internal oxidation process. These products are mainly used in various low-voltage switchgear.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the latest version (including all amendments) applies to this document. In this document.

GB/T 2828.1-2012 Sampling procedures for inspection by attributes Part

3 Terms and Definitions

The terms and definitions defined in GB/T 2900.4 apply to this document.

4 Requirements

4.1 Appearance The surface of the electrical contact product should be free of cracks, bubbles, missing edges, missing corners, visible depressions and spots, and the thickness of the electrical contact product should not exceed 1 mm. The edge burr height should not exceed

0.03 mm, and the burr height of the electrical contact product with a thickness greater than 1 mm should not exceed

0.05 mm. When the welding surface and working surface of the physical and electrical contact product cannot be distinguished visually, they should be marked. If there are special requirements, the supply and demand parties shall negotiate and decide.

4.2 Dimensional tolerances and markings The dimensional tolerance and marking of electrical contacts shall comply with the provisions of GB/T 5587, or be determined by negotiation between the supplier and the buyer.