ICS 71.060.50
CCS G 12

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 26525-2022

Replacing GB/T 26525-2011

Refined cobaltous chloride

精制氯化钴

Issued on: April 15, 2022 **Implemented on: November 1, 2022**

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

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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 26525-2011 "Refined cobaltous chloride". Compared with GB/T 26525-2011, apart from structural adjustments and editorial changes, the main technical changes are as follows:

- changed the indexes for the cobalt content, the water-insoluble matter content, the oil content and the content of ten impurity metal ions such as nickel (see 5.2; 4.2 of the 2011 edition);

- added the potentiometric titration method to the determination of the cobalt content (see 6.3.1);

- added the indexes and the test methods for the content of aluminium, silicon, phosphorus, sulfur, lithium, sodium and magnetic foreign matter (see 5.2, 6.4);

- changed the test method for the impurity metal ions to inductively coupled plasma optical emission spectrometry (see 6.4; 5.5, 5.6, 5.7 and 5.9 of the 2011 edition).

Attention is drawn to the possibility that some of the content of this document may be the subject of patent rights. The issuing body of this document bears no responsibility for identifying such patent rights.

This document was proposed by the China Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Chemical Standardization (SAC/TC 63).

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This document was first issued in 2011; this is the first revision.

Warning

This product is listed in the Catalogue of Hazardous Chemicals (2015 edition) and is a hazardous chemical; it shall be handled with care. Personnel using this document shall have practical experience of work in a formal laboratory. This document does not point out all the possible safety problems. It is the responsibility of the user to take suitable safety and health measures and to ensure compliance with the conditions laid down by the relevant national regulations. Some of the reagents used in the test methods are corrosive; if they splash on the skin or in the eyes, rinse immediately with water and, in a serious case, seek medical attention at once.

1 Scope

This document specifies the requirements, the test methods, the inspection rules and the marking, labelling, packaging, transport and storage of refined cobaltous chloride.

This document applies to refined cobaltous chloride.

Note: this product is used mainly in electroplating and in the battery, catalyst and pharmaceutical raw material industries.

2 Normative references

The contents of the following documents constitute indispensable provisions of this document through normative reference in the text. For dated references, 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 191-2008 Packaging - Pictorial marking for handling of goods · GB/T 6678 General

principles for sampling chemical products · GB/T 6682-2008 Water for analytical laboratory use - Specification and test methods · GB/T 8170 Rules of rounding off for numerical values and expression and judgement of limiting values · HG/T 3696.1 Inorganic chemicals for industrial use - Preparations of standard and reagent solutions for chemical analysis - Part 1: Preparations of standard volumetric solutions · HG/T 3696.2 Inorganic chemicals for industrial use - Preparations of standard and reagent solutions for chemical analysis - Part 2: Preparations of impurity standard solutions · HG/T 3696.3 Inorganic chemicals for industrial use - Preparations of standard and reagent solutions for chemical analysis - Part 3: Preparations of reagent solutions

3 Terms and definitions

No terms and definitions need to be defined for this document.

4 Molecular formula and relative molecular mass

Molecular formula: $CoCl_2·6H_2O$.

Relative molecular mass: 237.92 (according to the 2018 international relative atomic masses).

5 Technical requirements

5.1 Appearance: red or purple-red crystals.

5.2 Refined cobaltous chloride shall comply with the requirements of Table 1.