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

GB/T 6465-2008

Replacing GB/T 6465-1986

**Metallic and other non-organic coatings -- Corrodokote
corrosion test (CORR test)**

金属和其他无机覆盖层 腐蚀膏腐蚀试验(CORR试验)

(English Translation)

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Foreword

This standard is identical with ISO 4541. 1978 "Metallic and other inorganic coatings Corrodokote corrosion test (CORR test)" (In English).

For ease of use, this standard made the following editorial changes.

- Canceled international standards foreword;
- Cited international standards of our standards;
- Use the "standard" instead of "this International Standard." this standard replaces GB/T 6465-1986 "Metallic and other inorganic coatings Corrodokote corrosion test (CORR test)." versus GB/T 6465-1986 compared to the main changes are.
- ISO 1462 by ISO 10289:1999 replaced the corresponding national standard GB/T 6461-2002;
- ISO 3768 by ISO 9227:1990 replaced the corresponding national standards GB/T 10125-1997;
- Increasing the introductory phrase of normative references;
- According to China standard format re-edited the standard format.

The standard proposed by China Machinery Industry Federation.

This standard layer Standardization Technical Committee (SAC/TC57) administered by the National Metal and non-metal cover.

This standard was drafted. Wuhan Institute of Material Protection, Ma On Shan Ding Tai Rare Earth New Materials Co., Ltd., Beijing Yongtai and corrosion Technology Co., Ltd.

Introduction

In many cases, accelerated corrosion test results with no other media corrosion resistance is directly related to the corrosion process because of the impact of several Factors, such as the formation of the protective film and the conditions encountered great difference. Therefore, the test results should not be viewed as being in the test material There are occasions direct guidance corrosion resistance characteristics test different materials as these are not always tested materials in use, the relative corrosion resistance Direct guidance.

GB/T 6465-2008/ISO 4541. 1978 Metallic and other inorganic coatings Corrodokote corrosion test (CORR test)

1 Scope

This standard specifies the evaluation of the quality of metals and other inorganic coating layer etching paste method reagents, equipment and procedures.

This method is mainly for copper - Nickel - chromium or nickel - chrome plating.

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 6461 on the metal base metals and other inorganic coatings by etching after the test specimens and ratings (GB/T 6461-2002, ISO 10289:1999, IDT) GB/T 10125 artificial atmosphere corrosion test salt spray test (GB/T 10125-1997, eqv ISO 9227:1990) Principle 3 the mud paste coating containing corrosive salts on the sample, to be dried mud paste, the sample was placed in a high relative humidity chamber as required Cycle time of exposure.

The preparation of the fourth etching paste $[2 \cdot 3\text{H}_2\text{O Cu (NO}_3\text{)}]$, 0.165g of reagent grade ferric chloride in a glass beaker 0.035g of reagent grade copper nitrate $[\text{FeCl}_3 \cdot 6\text{H}_2\text{O}]$ and 1.0g of reagent grade ammonium chloride $[\text{NH}_4\text{Cl}]$ was dissolved in 50.0mL of distilled water, stirring, 30.0g with water Washed kaolin clay, stirring with a glass rod, the slurry thoroughly mixed and allowed to stand for 2min, to the kaolin was fully saturated. use Before then the glass rod stirring to mix well.

Note 1: Another method of preparation Corrodokote follows. weigh 2.50g of copper nitrate $[\text{Cu (NO}_3\text{)} 2 \cdot 3\text{H}_2\text{O}]$ in 500mL volumetric flask was diluted with distilled water to the mark Degrees, said 2.50g ferric chloride $[\text{FeCl}_3 \cdot 6\text{H}_2\text{O}]$ in 500mL volumetric flask was diluted with distilled water to the mark,

says 50.0g ammonium chloride [NH₄Cl] in 500mL volumetric flask with distilled water to the mark, then take 7.0mL copper nitrate solution, 33.0mL 10.1mL ferric chloride solution and chlorine Ammonium hydroxide solution was added to the beaker and 30.0g kaolin, stirring with a glass rod.

Note 2: The ferric chloride solution shall have a rubber stopper or glass-stoppered flask in a dark place preservation, shelf life should not exceed two weeks. Because place too long, the solution will it becomes unstable.

5 Device

5.1

device includes a humidity chamber, sample holder, heating unit and air circulation inside the device.

5.2

housing should be designed so the top box, or a box on the wall of the sample holder droplet accumulation will not fall on the sample.

5.3

structural material may not affect the test.

6 Sample

Number and type of test results and evaluation criteria are based on the selected sample tested 6.1 overlay or product specification may be.

Samples available a suitable solvent, such as ethanol, ether, acetone or petroleum ether cleaned before the test 6.2. Shall not be used or can generate corrosive protection Solvent film.

GB/T 6465-2008/ISO 4541. 1978