

ICS 25.220.40

CCS A 29



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

GB/T 9789-2008

Replacing GB/T 9789-1988

**Metallic and other non-organic coatings -- Sulfur dioxide test
with general condensation of moisture**

金属和其他无机覆盖层 通常凝露条件下的二氧化硫腐蚀试验

(English Translation)

Issued on: June 19, 2008

Implemented on: January 1, 2009

Issued by: Standardization Administration of China

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Equipment and materials
 - 3.1 Test Chamber
 - 3.2 Thermostat

Foreword

This standard is equivalent to international standards ISO 6988. 1985 sulfur dioxide under "metals and other inorganic coatings general condensation Corrosion Test "(in English).

This standard is based on ISO 6988. 1985 Translation drafted. For ease of use, the editorial changes made the following standard.

--- Delete international standards foreword, preface increased our standards;

--- "This International Standard" be replaced by "of this standard." this standard replaces GB/T 9789-1988 "sulfur dioxide corrosion test under metal and other non - organic coatings general condensation Experience. " Compared with GB/T 9789-1988 The main changes are as follows.

--- With GB/T 6461-2002 "on the metal base metals and other inorganic coatings by etching after the test specimens and the rating of" Replace GB/T 6461-1988 "metal plating layer covering a sample rating for the substrate to cover the cathode layer after corrosion tests";

--- Increasing the reference standard GB/T 16545-1996 "Removal of corrosion products from corrosion of metals and alloys of the sample." 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., Zhejiang Xinfeng Holdings Limited Company, Beijing Yongtai and anti-corrosion Technology Co., Ltd.

Drafters of this standard. Zhangsan Ping, Anjiang Feng, Zheng Penghua, Shi Zhimin, Zheng Xiulin, Liu Ji Lu, Zhang Hongwei, Zhengxiu Hai.

This standard replaces the standards previously issued as follows.

--- GB/T 9789-1988.

GB/T 9789-2008/ISO 6988. 1985 Metallic and other inorganic coatings generally Gel Sulfur dioxide test conditions

1 Scope

This standard specifies the sulfur dioxide in the atmosphere and condensation of containing materials or test methods for corrosion resistance of the product.

Wood standard applies to metallic coatings and inorganic coatings for corrosion tests.

This standard does not apply to corrosion testing paints and varnishes cover layer.

The test results can not be directly used as the test material in all kinds of environments encountered in the use of corrosion resistance guide also can not be Direct guidance materials for different relative corrosion resistance when in use.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms of 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.

Rating of test specimens and the (GB/T 6461- after the metals and other inorganic coatings after corrosion test GB/T 6461 metal matrix 2002, ISO 10289:1999, IDT) GB/Clear T 16545 corrosion test specimens of metals and alloys corrosion products (GB/T 16545-1996, idt ISO 8407:1991)

3.1 Test Chamber

Best to use volume $300\text{dm}^3 \pm 10\text{dm}^3$, its door should be tightly closed, and fitted with 3.2,3.3,3.4 as specified components.

Typical door and bell chamber shown in Figure 1.

3.1.1 Structural Materials

All structural materials used in the chamber should be resistant to moisture corrosive sulfur dioxide atmosphere, and these materials themselves may not be released for Corrosive gas or vapor sample any impact.

The lower part of the tank wall and the bottom should be able to heat, and can accommodate at least about 2.5dm^3 dissolved sulfur dioxide in water without leakage. Suitable materials for lead pack in these areas and as a box frame and joint material.

Before the new box used as a test, at least should be no-load operation (not placed in the sample) a period of normal operation steps. It should be fed 2dm³ sulfur dioxide gas, in order to reduce structural materials due to the atmosphere inside the steam risk of contamination.

3.1.2 Shape

Chamber shape allows for some changes, but the moisture condensation on the lid can not drip onto the inside of the sample, the tank top and the big plane About a 12 ° angle, and you can meet the requirements.

3.1.3 Install

Chamber should be installed in a clean room atmosphere, and make it not to be too fast or large temperature fluctuations and direct sunlight and strong Stream interference (see 6.5.2).

3.2 Thermostat

Temperature control device includes a safety thermometer in the upper part of the chamber and a temperature sensor readings from outside the test chamber, the thermometer Mercury ball from the top of the box and the box door 150mm, distance from the nearest tank wall is 250mm.

GB/T 9789-2008/ISO 6988. 1985