

ICS 83.080.20

CCS G 32



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

GB/T 2914-2008

Replacing GB/T 2914-1999

**Plastics -- Homopolymer and copolymer resins of vinyl chloride
-- Determination of volatile matter (including water)**

塑料 氯乙烯均聚和共聚树脂 挥发物(包括水)的测定

(English Translation)

Issued on: May 15, 2008

Implemented on: November 1, 2008

Issued by: Standardization Administration of China

Table of Contents

Foreword

1 Scope

3 Instrument

3.1 Method A (using an oven and balance)

3.2 Method B (using automatic thermal gravimetric analysis balance)

4.1 Method A

4.2 Method B

Foreword

This standard is identical with ISO 1269. "Determination of vinyl chloride homopolymer and copolymer resins volatile matter (including water) of" 2006 (E) (English Chinese Version).

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

- a) "this International Standard" be replaced by "this standard";
- b) use a decimal point instead of a decimal comma " , " . " , " ;
- c) Remove the preface to the international standards.

This standard replaces GB/T 2914-1999 "vinyl chloride homopolymer and copolymer resins volatile matter (including water) of the determination." this standard GB/T 2914-1999 and the main technical differences are as follows.

- Modify the balance requirements (1999 version 3.3, this version 3.1.3);
- Modified heating constant weight requirements (1999 version 4.3, this version 4.1);
- Increasing the method B (this standard 3.2,4.2,5.2);
- Added "deviation" chapter (Chapter 6 of this standard).

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Standardization Technical Committee of plastic PVC resin product Club (SAC/TC15/SC7) centralized.

This standard was drafted. Jinxi Chemical Industry Research Institute, Qingdao Haijing Chemical Group Co., Ltd., Fujian Southeast Electrochemical Co., Ltd., China Petrochemical Qilu Company Ltd. chlor-alkali plants.

1 Scope

This standard specifies two measuring vinyl chloride homopolymer and copolymer resins in volatile matter (including water) method.

Principle 2

The resin sample tile in a predetermined size weighing dish, at a suitable temperature to constant mass.

3.1 Method A (using an oven and balance)

3.1.1

The oven can be controlled at $(110 \pm 2) ^\circ\text{C}$ and a weak natural ventilation or with a low speed circulation fan.

3.1.2

weighing dish diameter of about 80mm, a height greater than 5mm, glass, aluminum or stainless steel (preferred) made of shallow cover weighing dish.

3.1.3

scales, accurate to 0.001g.

3.1.4

drier, filled with a suitable desiccant.

3.2 Method B (using automatic thermal gravimetric analysis balance)

3.2.1

oven can be controlled at $(110 \pm 2) ^\circ\text{C}$.

3.2.2

Automatic thermal gravimetric analysis balance, including a precision balance and an infrared or halogen heating chamber. Automatic thermal gravimetric analysis balance by testing the quality of the readings automatically volatiles were evaporated to constant mass.

3.2.3

weighing dish diameter of about 100mm, height is greater than 5mm, aluminum.

3.2.4

scales, accurate to 0.001g.

3.2.5

drier, filled with a suitable desiccant.

Step 4

4.1 Method A

Adjust oven (3.1.1) to $(110 \pm 2) ^\circ\text{C}$. Heated lid weighing dish (3.1.2) in the oven for about 1h, when you open the lid on the warming heating Box. Out in a desiccator (3.1.4) to cool to room temperature and then weighed weighing dish and lid to the nearest 0.005g.

Approximately 5g of the sample spread evenly in the bottom of the weighing pan, cover weighing, accurate to 0.005g.

Push the complete dish was placed in an oven $(110 \pm 2) ^\circ\text{C}$, open the lid but placed in an oven and heated for about 1h.

The dish was removed from the oven, close the lid. After cooling in a desiccator to room temperature and weigh to the nearest 0.005g.

Follow the same steps, then a half-hour cycle of heating in an oven, until two successive weighing results no greater than 0.005g.

NOTE: $(110 \pm 2) ^\circ\text{C}$ prolonged heating may cause some thermal degradation of the resin. In this case, it is recommended to control the evaporation process at $(105 \pm 2) ^\circ\text{C}$.

On the same samples were assayed.

4.2 Method B

Adjust oven (3.2.1) to $(110 \pm 2) ^\circ\text{C}$. Heating aluminum weighing dish (3.2.3) about 1h, out of the desiccator (3.2.5) and cooled to room temperature.

The dish was placed in automatic thermal gravimetric analysis balance (3.2.2) the tare.

Based on resin type, (5 ~ 15) g of the sample spread evenly in the bottom of the weighing dish, weighing, accurate to 0.005g.

GB/T 2914-2008/ISO 1269:2006