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

**GB/T 9345.5-2010**

Replacing GB/T 13453.3-1992

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**Plastics -- Determination of ash -- Part 5: Poly (vinyl chloride)**

塑料 灰分的测定 第5部分：聚氯乙烯

**(English Translation)**

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### Foreword

GB/T 9345 "Plastics - Determination of ash" is divided into five parts.

- Part 1. General Method;
- Part 2. polyethylene terephthalate, alkylene esters;
- Part 3. Unplasticized cellulose acetate;
- Part 4. Polyamide;
- Part 5. PVC.

This section GB/T Section 59345, which corresponds to ISO 3451-5:2002 "Plastics - Determination of ash - Part 5. polychloroprene Ethylene "(in English). This part identical with ISO 3451-5:2002.

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

- a) "this International Standard" be replaced by "GB/T 9345", the "ISO 3451 this part" to "GB/T 9345 this part 'or "This part of the";
- b) Delete the ISO 3451-5:2002 Foreword;
- c) use of decimal symbol instead of the international standard decimal symbol ", ". ", ";
- d) Normative references cited identical with the international standards our standards.

This Part replaces GB/T 13453.3-1992 "PVC ash and sulfated ash determination." Part of GB/T 13453.3-1992 and this is the main difference.

- Added "foreword";

- Added "warnings";
- Increased (Chapter 2 of this edition) "Normative references" chapter;
- Adds a method for measuring ash content. C Act (edition 7.4);
- Increased "security" (chapter 6th edition);
- Added "Determination of times" (Chapter 8 of this edition);
- Added "precision and bias" (Chapter 10 of this edition);
- "Test Report" section to add a "Test methods used, sample quality, test date, mixed acid ratio, the quality is not burning 3h Constant "and so on (the 1992 edition, Chapter 7; Chapter 11 of this edition);
- On the "scope" was supplemented (see Chapter 1);
- Modified ignition temperature (1992 Version 5.1; this version 7.2.1);
- Modify the sample used to test the quality of the (1992 version 5.1; 7.1 edition);
- Modify the crucible specification (1992 version 4.1; 5.1 edition);
- Modify the parallel deviation is requested (1992 Version 6.2; Chapter 8 of this edition).

This part is proposed by the China Petroleum and Chemical Industry Association.

This part of the National Standardization Technical Committee plastic polyvinyl chloride resin Club (SAC/TC15/SC7) centralized.

This section is drafted. Jinxi Chemical Industry Research Institute.

Drafters of this section. Lijuan, Chenpei Yun, Dufeng Mei.

This section replaces the following previously issued as follows.

--- GB/T 13453.3-1992.

Please note that some of the content of this section may involve patents, this part of the release mechanism should not bear the responsibility to identify these patents.

Plastics - Determination of ash Part 5. PVC Warning --- GB/T 9345 in this section may involve the use of hazardous chemicals, materials, operations and equipment. This section does not States with the use of this part of the related security issues. Users of this section has the responsibility to establish appropriate safety and health system, and the use of Before determining the applicability of these rules and regulations.

Polyvinyl chloride and other fumes released during thermal decomposition, precautions should be taken to avoid inhalation.

## 1 Scope

This section GB/T 9345 specifies the three measurement methods PVC ash. Adopted GB/T 9345.1 in the general procedure.

A method for measuring ash content, method B and C for the determination of sulfated ash. Three methods can be applied to the resin mixture and manufactured goods.

When should the presence of lead-containing compounds using the method B and C.

## 2 Normative references

The following documents contain provisions which, through reference to GB/T 9345 to the present, constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 9345.1-2008 Plastics - Determination of ash - Part 1. General method (ISO 3451-1:1997, IDT) Principle 3

### 3.1 Method A (direct burning)

After the test samples of the organic matter is burned off, and the residue was calcined at 950 deg.] C until constant mass.

### 3.2 Method B (post-combustion process with sulfuric acid re-ignition)

After the test samples of the organic matter is burned off, and the residue was treated with concentrated sulfuric acid is converted to sulphate, the final residue was calcined at 950 deg.] C, until Constant quality.

### 3.3 Method C (pre-combustion process with sulfuric acid re-ignition)

In a sample organics concentrated sulfuric acid was added after burning off, and the residue was calcined at 950 deg.] C, until a constant mass. Since this method Junction If repeatability is better than the method B, thus being both recommended this Law.

If the presence of lead-containing compound, use Method B or Method C.

## 4 Reagents (only Method B and Method C)

### 4.1

sulfuric acid, the density of 1.84g/mL, AR.

#### **4.2**

acetic acid, 100%, AR.

Warning --- should be used with caution sulfuric acid and acetic acid.

### **5 Instruments**

9345.1-2008 instrument according to the provisions of GB/T , detailed as follows.

#### **5.1**

cover a quartz crucible, a platinum crucible or porcelain crucible, catchy diameter 45mm ~ 75mm, height and diameter equal to the volume of sample should be installed