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

GB/T 21991-2008

Replacing GB/T 12004.2-1996

**Plastics -- Preparation of PVC paste for test purpose --
Planetary-mixer method**

塑料 试验用聚氯乙烯 (PVC) 糊的制备 行星混合器法

(English Translation)

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Foreword

This standard is identical with ISO 4612:1999 (E) "plastic test polyvinyl chloride (PVC) paste prepared in a planetary mixer Law" (English Chinese Version) (November 11, 2004 confirmation).

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 point ", ". ", ";
- c) Remove the preface to the international standards.

This standard replaces GB/T 12004.2-1996 "Preparation of PVC paste resin paste." this standard and GB/T 12004.2-1996 main technical differences are.

- Modify the standard English name;
- Increased (Chapter 3 edition) chapter "Terms and Definitions";
- Remove the "agent" (Chapter 3, 1996 edition) chapter;
- "Instrument" chapter was changed to "equipment and materials" (1996 edition Chapter 4, Chapter 5 edition);
- Remove the paste formulation system (1996 edition Table 1);
- Adds a pasting method (1996 Edition Chapter 5, Chapter 7 edition);
- Modify the prepared paste temperature requirements (1996 version 5.7, Chapter 7 edition);
- Modified vacuum degassing conditions (1996 version 5.8, Chapter 7 edition);
- Increasing the paste to preserve the environment requirements (Chapter 7 edition);
- Added a mixing bowl/agitator configuration diagram (2 territory in 1996, edition Figure 2).

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, Tianjin Bohai Chemical Co., Ltd. day.

1 Scope

This standard specifies the appropriate PVC resins, plasticizers and other components through a planetary mixing process to prepare a paste (also called plastisol) Two Methods, namely Method A and Method B.

Methods A and B can be used to paste prepared by any component. Method A (single speed) is particularly suitable for pasting process is easy to heat build tree Fat, and the method B (double speed) because of its short mixing time is more suitable for repeated operations such as resin production process control.

This paste can be used to test a variety of purposes, including the determination of naming and specifications used in the resin in the resin rheology.

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 2918-1998 standard plastic sample conditioning and environment testing (ISO 291:1997, IDT)

3 Terms and Definitions

The following terms and definitions apply to this standard.

(Plastisol) PVC resin in an organic liquid of a uniform dispersion.

One kind of mixer whose stirrer or a stirring blade is not only about the axis of rotation of the mixing vessel, and the axis of rotation itself in a circular motion.

Principle 4

The liquid plasticizer, PVC resin powder and other ingredients in a suitable liquid, paste or powder form were mixed in a mixer, shearing action of the Powder is dispersed in a liquid.

Pasting process on the part of the solvent include plasticizers resin powder, and thus

"dispersion" can long remain liquid, a powder that is not easily settlement.

5 Apparatus and materials

5.1

planetary mixer, characterized by having at least the key shown in FIG. 1, and having such a mixing bowl/stirrer structure shown in Figure 2 wherein Similar one.

Mixing bowl should be made of stainless steel, it can be equipped with a cooling jacket for water circulation. Mixing bowl which should be specified by the manufacturer a recommendation Loadings should be made (700 to 1200) by the amount of g corresponding proportion of resins, plasticizers, and any other components of the composition thoroughly mixed.

The motor should have sufficient power, when most sticky paste to be mixed, the mixing bowl can be maintained around the axis of the agitator speed GB/T 21991-2008/ISO 4612:1999