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

GB/T 4611-2008

Replacing GB/T 4611-1993

**Determination method of fish eyes for polyvinyl chloride resins
of general use**

通用型聚氯乙烯树脂“鱼眼”的测定方法

(English Translation)

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Foreword

This standard corresponds to the Russian standard GOCT14332-1978 (RU) (confirmed in 1997) "Suspension Polyvinyl Chloride Resin" in 3.5 and the degree of agreement with GOCT14332-1978 is non-equivalent.

This standard replaces GB/T 4611-1993 "Universal polyvinyl chloride resin" Fisheye "test method".

The main differences between this standard and GB/T 4611-1993 are.

- increase the warning language;
- Added chapter "Terminology and definition" (Chapter 3 of this edition);
- modified the requirements of the material (1993 edition of Chapter 3, this edition of Chapter 4);
- Adjust the speed ratio of the two-roll presses (1993 version 4.1, version 5.1);
- the provisions on the type of temperature measuring instrument (1993 version 4.2, version 5.2) were deleted;
- Table 1 and Table 2 increased the SG9 (viscosity less than 73) of this model resin, but did not specify the preparation of its sample preparation and production temperature (Determined in Table 1 and Table 2, Table 1 and Table 2);
- Adjust the order in which materials are added to the preparation sample (1993 version 5.3, version 6.3.1);
- Removal of roller surface wind speed requirements (1993 version 5.3.2, version 6.3.2);
- Adjust the time to check the thickness of the test piece (1993 version 5.3.5, version 6.3.5);

--- Added the "Test Report" chapter (Chapter 8 of this edition).

Appendix A to this standard is an informative appendix.

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

This standard by the National Plastics Standardization Technical Committee of PVC resin products sub-technical committee (SAC/TC15/SC7) centralized.

The drafting of this standard unit. Jinxi Chemical Research Institute, Xinjiang Tianye (Group) Co., Ltd.

1 Scope

This standard specifies the method of determining the number of universal "polyvinylchloride resin" (PVC) "fish eyes" by calendering.

This standard is applicable to the determination of the number of "fish eyes" of general purpose polyvinyl chloride resin.

2 Normative reference documents

The terms of the following documents are incorporated by reference in this standard and are the terms of this standard. Any reference to the date of the document, (Excluding corrigenda) or revisions do not apply to this standard, however, encourage the parties to reach an agreement under this standard Whether the latest version of these files can be used, and the most recent version of the referenced document, which is not dated, applies to this standard.

GB/T 7044 Pigment Carbon Black GB/T 11406 Industrial dioctyl phthalate HG/T 2338 barium stearate (light)

3 Terms and definitions

The following terms and definitions apply to this standard.

Transparent or translucent plastic film or sheet, the visible "fish-eye" -like defects, that is, resin in the molding process has not been fully plasticized of the particles.

4 Principle

The sample according to the provisions of the formula and production conditions rolled into pieces, in the detection box to count a certain area in the "fish eye" number.

5 Material

5.1

dioctyl phthalate (DOP), in line with GB/T 11406 first-class technical indicators.

5.2

barium stearate (light), in line with HG/T 2338 first-class technical indicators.

5.3

carbon black, in line with GB/T 7044 in the pigment carbon black technical requirements, and through the 0.149mm sieve screening.

6 Instruments

6.1

two-roll molding machine, 160mm x 320mm, the ratio of 1. (1.22 ~ 1.35) (fast roller speed 19.5r/min ~ 24.0r/min) the surface temperature of the roller can be controlled at (140 to 165) °C $\pm$ 2 °C. The other parameters of the press can also be used in the report should specify the specifications, but Arbitration shall be made in accordance with the provisions of the equipment.

6.2

surface thermometer, range (140 ~ 165) °C range, the scale value of 1 °C, thermocouple tolerance of not less than 3, when used with reference Record A correction.

6.3

Thickness gauge, (0 ~ 5) mm, scale value 0.01mm.

6.4

stopwatch.