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

GB/T 21868.5-2008

**Pigments and extenders -- Methods of dispersion for
assessment of dispersion characteristics -- Part 5: Dispersion
using an automatic muller**

颜料和体质颜料 评定分散性用的分散方法 第5部分:用自动平磨机分散

(English Translation)

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Foreword

This section identical with the international standard ISO 8780-5. "Part 5 dispersion method of pigments and extenders assessment of dispersion characteristics by 1990 Score. automatic dispersion mill flat "(in English).

This section is one of the GB/T 21868 "dispersion method of pigments and extenders assessment of dispersion characteristics with" national standards, listed below A series of national standards with international standards and the structure corresponding to.

- Part 1. General (ISO 8780-1:1990);
- Part 2. oscillation mill dispersion (ISO 8780-2:1990);
- Part 3. dispersion using a high speed mixer (ISO 8780-3:1990);
- Part 4. sand dispersion (ISO 8780-4:1990);
- Part 5. automatic flat mill dispersion (ISO 8780-5:1990);
- Part 6. (1990 ISO 8780-6) dispersed with a three-roll mill.

This section GB/T 21868 Part 5.

Are listed below in this section is closely related to the GB/T 21867 "Evaluation Method pigments and dispersion" series of national standard Prospective structure and corresponding international standards.

- Part 1. Changes the tinting strength of colored pigments to be assessed (ISO 8781-1:1990);
- Part 2. change the fineness of grind to be assessed (ISO 8781-2:1990);
- Part 3. Evaluation of changes in the gloss (ISO 8781-3:1990).

This section of Appendix A normative appendix.

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

This part of the National Standardization Technical Committee and is under the jurisdiction of paints and pigments.

This section is drafted. in the construction of Changzhou coating Chemical Research Institute, Kunshan City Shiming Technology Development Co., Ltd.

1 Scope

This section provides the use of automatic-mill dispersion method of pigments and extenders.

This method is suitable for a relatively small amount of pigment quality control samples.

High viscosity binder in this section should be combined with GB/T 21867 of the evaluation method, the use of non-volatile solvent agreed system. This section should be read in conjunction with the GB/T 21868.1-2008.

This method is limited to the high viscosity of the mill base. Its results can not be obtained using other methods of dispersion results Comparison.

2 Normative references

The following documents contain provisions which, through reference GB/T 21868 in this section constitute provisions of this section. For dated references, all subsequent amendments (excluding corrections) or revisions do not apply to this section, however, encourage an agreement under this section Parties to study the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 3186-2006 Paints, varnishes and raw materials for paints and varnishes - Sampling (ISO 15528:2000, IDT) GB/T 21868.1-2008 Methods for dispersing pigments and extenders assessment of dispersion characteristics with 1. General (ISO 8780-1.

1990, IDT)

GB/T 21867.1-2008 Evaluation Method of pigments and dispersion - Part 1. change the tinting strength of colored pigments of assessed (ISO 8781-1:1990, IDT) GB/T 21867.2-2008 Evaluation Method of pigments and dispersion - Part 2. Changes by the fineness of grind was Assessment (ISO 8781-2:1990, IDT) GB/T 21867.3-2008 Evaluation Method of pigments and dispersion - Part 3. Evaluation of changes in the gloss (ISO 8781-3:1990, IDT)

3 Requires supplementary information

Test methods specified in this part needs to be improved with additional information. The contents of the supplementary information is given in Appendix A.

4 Equipment

Normal laboratory equipment and glassware, as well as the following instruments.

4.1

Automatic Flat grinding. with frosted glass plate, a glass plate diameter should be 180mm ~ 250mm, applying a variable on a flat mill but known Up 1kN force. Plate rotational speed is 70r/min ~ Switch 25 is equipped with a multiple of the number of revolutions means 120r/min, the instrument.

4.2

spatula. a flexible steel or plastic.

5 Binder system

Binder system shall be agreed upon between the parties concerned, the test report shall specify the base paint, solvents and paints group concentration in the solvent, and gives the binder system Rheological description (such as viscosity).

For all experiments the same group should use the same batch of paint-based systems.

NOTE: To improve the accuracy of the method, we recommend the use of non-volatile solvent-based paint systems.

GB/T 21868.5-2008/ISO 8780-5:1990