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

GB/T 12006.1-2009

Replacing GB/T 12006.1-1989

**Plastics -- Polyamides -- Part 1: Determination of viscosity
number**

塑料 聚酰胺 第1部分：黏数测定

(English Translation)

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Table of Contents

Preface	
1 Scope	
2 Normative references	
3 Terms and definitions	
4 Principle	
5 Reagents and materials	
6 Instruments	
Sample Preparation	7
8 Sample calculation	
Select the 9 solvent	
10 Step	
11 Expression of results	
12 Repeatability and reproducibility	
13 Relationship 96% (mass fraction) sulfuric acid solution and the number of sticky measured in various solutions of	
9 14 test reports	
Appendix A (informative) Determination of the concentration of industrial sulfuric acid (95% to 98%) and 96% by titration was adjusted to	

Foreword

GB/T 12006 "plastic polyamide" is currently divided into the following two parts.

--- Part 1. Determination of viscosity number;

--- Part 2. Determination of moisture.

This section GB/T Part 112 006, equivalent using ISO 307:2007 "plastic polyamide viscosity number determination" (in English), Exactly the same technical content. For ease of use, this section made the following editorial changes.

--- To the "international standards" be replaced by "this section";

--- Remove the ISO 307:2007 Foreword Introduction;

--- Increasing the preface of this section;

--- Use of decimal symbol instead of the international standard decimal symbol " , " , " ;

--- For ISO 307:2007 international standard referenced, not tantamount to the adoption of the standards of China, are directly referenced in the standard.

This Part replaces GB/T 12006.1-1989 "polyamide viscosity number determination method", compared with the GB/T 12006.1-1989, the main technical Art content changes as follows.

--- Change the standard name;

--- "Normative references" a different chapter;

--- Increased Chapters 9 and 13 chapters;

--- Increased three solvents (see 5.1);

--- Increasing the polymer concentration is calculated (see Chapter 11);

--- Increased Hagenbach correction;

--- No precision content.

This section of the Appendix A, Appendix B, Appendix C, Appendix D, Appendix E is an information appendix.

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

This part of the National Standardization Technical Committee of plastic products and plastic resins General Methods Chapter (SAC/TC15/SC4) centralized.

This section is responsible for drafting. National Quality Supervision and Inspection Center of synthetic resin.

This section participated in the drafting unit. China Shenma Group Co., Ltd., Guangzhou Blonde Technology Co., Ltd., Guangzhou Institute of synthetic material Study hospital.

1 Scope

GB/T 12006 provisions of this part of the determination of the solvent in certain provisions of polyamide dilute solution viscosity number.

Polyamide samples should be completely dissolved in the selected solvent. Additives such as flame retardants and modifiers, etc. often affect viscosity test, formic acid the cause high viscosity number, low viscosity in sulfuric acid causes the number. The degree of influence depends on the polyamide compound additive, content, save in some of the other additives and formulations and other conditions.

For pure polyamide or polyamide containing no additive effect on the viscosity of the test, which measures the viscosity of a polymer molecule is provided the amount of test methods. Pure polyamide or polyamide containing no additive effect on the viscosity of the test, the viscosity of a solvent from converting to another Solvents.

Additive-containing polyamide, the impact of additives on viscosity test, which should indicate that the viscosity of the solvent and material composition used. This situation by measuring the viscosity of the solvent can not be converted from one to another solvent.

This method is applicable according to ISO 1874-1 named PA46, PA6, PA66, PA69, PA610, PA612, PA11, PA12, PA6T/66 under, PA6I/6T, PA6T/6I/66, PA6T/61, PA6I/6T/66 and PAMXD6 polyamide, and in any conditions Copolyamides can be dissolved in a solvent, a polyamide compound and a polyamide other provisions.

This method does not apply lactam anionic polymerization generated or generated by the cross-linking agent polyamide, such polyamide generally insoluble in provisions Solvent.

Viscosity of specific conditions in compliance with the provisions of this section in accordance with the general procedure GB/T 1632.1-2008 prescribed determined.

2 Normative references

The following documents contain provisions which, through reference GB/T 12006 in this section 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 1632.1-2008 plastic using a capillary viscometer dilute polymer solution viscosity - Part 1. General (ISO 1628-1:1998, IDT) GB/T 9345.4-2008 Plastics - Determination of ash - Part 4. Polyamide (ISO 3451-4:1998, IDT) ISO 1042:1998 laboratory glass container marking single flask ISO 1874-1 plastic polyamide (PA) molding and extrusion materials - Part 1. Designation ISO 3105 glass capillary viscometer motion specifications and instructions for use Determination of moisture content ISO 15512 plastic ASTM D789 polyamide (PA) standard method of measuring the relative viscosity JISK6920-2:2000 Plastics Polyamide (PA) molding and extrusion materials - Part 2. Preparation of test samples and determination of properties

3 Terms and Definitions

GB/T 1632.1-2008 to establish the following terms and definitions apply to this section.

GB/T 12006.1-2009/ISO 307:2007