

ICS 83.080.20
CCS G 31



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

GB/T 12010.2-2010

Replacing GB/T 12010.3-1989; GB/T 12010.4-1989; GB/T 12010.5-1989; GB/T 12010.6-1989; GB/T 12010.7-1989

**Plastic -- Poly (vinyl alcohol) (PVAL) materials -- Part 2:
Determination of properties**

塑料 聚乙烯醇材料 (PVAL) 第2部分: 性能测定
(English Translation)

Issued on: September 2, 2010

Implemented on: May 1, 2011

Issued by: Standardization Administration of China

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Performance Measurement

Foreword

GB/T 12010 "plastic material polyvinyl alcohol (PVAL)" is divided into eight sections.

--- Part 1. Designation system and basis;

--- Part 2. Performance measurement;

--- Part 3. Specifications;

Part --- Chapter 4. pH value measurement;

--- Part 5. Determination of the average degree of polymerization;

--- Part 6. Determination of particle size;

--- Part 7. Determination of sodium hydroxide;

--- Part 8. Determination of transparency.

This section GB/T Part 212 010, modification using ISO 15023-2:2003 "plastic polyvinyl alcohol (PVAL) materials Part 2. Performance Measurement "(in English).

This section lists the reg number and ISO 15023-2 in Appendix F.2003 Chapter control list numbered strips.

Taking into account China's national conditions, in the use of ISO 15023-2:2003 when this part has made several modifications. About the technical differences have been incorporated into positive this paper identifies and vertical single line in which they are involved with the provisions margin. These technical differences are given in Appendix G and List the reasons for your reference.

For ease of use, the ISO 15023-2:2003 This section also made the following editorial changes.

--- The "ISO 15023-2:2003 this part" to "GB/T 12010 this part" or "this part";

"," --- With a decimal point instead of a comma as the decimal point, "";

--- Remove the ISO 15023-2:2003 Foreword;

--- Increasing the foreword of this part of the standard.

12010.3-1989 "polyvinyl alcohol resin viscosity measurement method" in this section instead of GB/T , GB/T 12010.4-1989 "Poly Alcohol resin volatile Determination ", GB/T 12010.5-1989" residual polyvinyl acetate resin (or alcoholysis) Determination Party Method ", GB/T 12010.6-1989" polyvinyl acetate resin determination method ", GB/T 12010.7-1989" polyvinyl alcohol Resin ash determination. " this part of GB/T 12010.3 ~ 12010.7-1989 main differences are as follows.

--- Determination of volatile conditions were changed regularly measured (GB/T 12010.4-1989, this edition of Appendix A);

--- Determination of sodium acetate increased conductance method (GB/T 12010.6-1989, this edition of Appendix B);

Determination of sodium acetate --- unabated during the calculation of the deduction of sodium hydroxide (GB/T 12010.6-1989, this edition of Appendix B);

--- Ash content was determined to be calculated method (GB/T 12010.7-1989, this edition of Appendix C);

--- Determination of the degree of alcoholysis, cancel reflux (GB/T 12010.5-1989, this edition of Appendix D) when the sample is heated and dissolved;

--- Measured viscosity increases chute falling ball method (GB/T 12010.3-1989, this edition of Appendix E);

Determination of the viscosity curve --- changed the natural logarithm of the concentration on the viscosity curve (GB/T 12010.3-1989, this edition of Appendix E).

This section of the Appendix A, Appendix B, Appendix C, Appendix D and Appendix E for the normative appendix, Appendix F, Appendix G is an informative annex.

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 unit. China Petrochemical Group of Sichuan Vinylon Works.

Participated in the drafting of this section. National Quality Supervision and Inspection Center of synthetic resin, Hunan Xiangwei Limited, a Yunnan-dimensional shares the company.

1 Scope

GB/T 12010 provisions of this part of the performance measurement methods polyvinyl material.

This section applies to performance measurement alcohol solution is greater than 70% (mole fraction) of the polyvinyl alcohol material.

In addition to naming the performance of GB/T 12010.1 specified --- degree of hydrolysis and viscosity, the present section also includes provisions commonly used in polyvinyl alcohol Other properties of the material.

2 Normative references

The following documents contain provisions which, through reference GB/T 12010 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.

Preparation of GB/T 601 chemical reagent standard titration solution GB/T 603 chemical reagent in test methods - Preparations with GB/T 6682-2008 analytical laboratory use specifications and test methods (ISO 3696. 1987, MOD) GB/T 12010.4-2010 plastic material polyvinyl alcohol (PVAL) - Part 4. pH value measurement GB/T 12010.5-2010 plastic material polyvinyl alcohol (PVAL) - Part 5. Determination of the average degree of polymerization GB/T 12010.6-2010 plastic material polyvinyl alcohol (PVAL) - Part 6. Determination of particle size GB/T 12010.7-2010 plastic material polyvinyl alcohol (PVAL) - Part 7. Determination of sodium hydroxide GB/T 12010.8-2010 plastic material polyvinyl alcohol (PVAL) - Part 8. Determination of transparency JJG1002 viscometer

3 Performance Measurement

3.1

part of water used in the absence of other specified requirements, are in line with GB/T 6682 tertiary water. Standard Test Method used Standard solution, preparations and products were of analytical grade, unless otherwise stated according to GB/T 601, GB/T 603 was prepared.

Performance and measurement conditions specified in section 3.2 are shown in Table 1.

Table 1 Performance and measurement conditions

Property	Method	Unit	Test Condition
Volatile content	Appendix A	%	105 °C, 3h
sodium acetate content or conductivity	titration method	Appendix C	% ash content
Alcoholysis (value in mole fraction)	Appendix D	%	titration
viscosity	viscometer or chute falling ball viscometer	mPa · s	pH value of GB/T 12010.4-2010
pH value	1 pH meter	Size	GB/T 12010.6-2010
sieving	%		