



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

GB/T 39748.8-2021

**Urine-absorbing aids for incontinence - Test methods for
characterizing polymer-based absorbent materials - Part 8:
Gravimetric determination of flowrate**

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Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Instrument	2
6 Sampling	3
7 Step	3
8 Calculation	3
9 Accuracy	3
10 Inspection report	4
Appendix A (informative appendix) Statistical results of inter-laboratory tests	5

Foreword

GB/T 39748 "Test Method for Characteristics of Polymer Matrix Absorbent Materials for Urine Absorption Aids for Incontinence" is divided into the following parts.

- Part 1.Determination of pH;
- Part 2.Determination of residual monomer content;
- Part 3.Determination of particle size distribution by sieving method;
- Part 4.Determination of moisture content by heating weight loss method;
- Part 5.Determine the water absorption rate by weighing method in normal saline;
- Part 6.Gravimetric method to determine the retention rate of normal saline after centrifugation;
- Part 7.Gravimetric method to determine the amount of liquid absorbed under pressure;
- Part 8.Determination of flow by weighing method;
- Part 9.Determination of density by weighing method;
- Part 10.Potentiometric titration method to determine the amount of extractable polymer;
- Part 11.Determination of the content of inhalable particles.

This part is Part 8 of GB/T 39748.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this part is equivalent to the ISO 17190-8:2001 "Characteristics of Polymer Matrix Absorbent Materials for Incontinence Urine Absorption Aids"

Test methods for performance. Part 8. Gravimetric method to determine flow.

The Chinese documents that have a consistent correspondence with the international documents cited in this section are as follows.

---GB/T 10739-2002 Standard atmospheric conditions for handling and testing of paper, paperboard and pulp samples (equiv ISO 187:1990);

---GB/T 6379.2-2004 Measurement method and accuracy of results (accuracy and precision) Part 2. Determine standard measurement

The basic method of measurement method repeatability and reproducibility (ISO 5725-2:1994, IDT).

Introduction

The GB/T 39748 series of test methods were originally formulated by the European Disposable Nonwovens Association, without technical modification, and integrated into ISO 17190 is an international standard, divided into 11 parts.

These test methods have been used in practice for many years. According to the general standards (validity and reproducibility, etc.) of the test methods, the reliability has been measured.

It has been proved that it is suitable for the detection of sodium polyacrylate superabsorbent materials for sanitary products, including the detection of urine absorption aids for incontinent persons. This

These test methods are specifically used for testing materials, and are not applicable or applicable to the testing of finished urine absorption aids.

This part of GB/T 39748 is in accordance with ISO 17191 "Urine absorption aids for incontinence. Polyacrylic acid can be inhaled in the air. Highly absorbent water

Material Sodium Atomic Absorption Spectrometry for the Determination of Dust in the Collection Box" is used together.

Urine absorption aids for incontinence

Testing method of polymer matrix absorbent material properties

Part 8. Determination of flow rate by weighing method

1 Scope

This part of GB/T 39748 specifies the method for measuring the mass flow rate of polyacrylate (PA) super absorbent powder.

This section applies to materials with mass flow rates ranging from 10.62g/s to 11.93g/s (see Appendix A), and is expected to be suitable for larger mass flows

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

ISO 187 Standard atmospheric conditions for the treatment and testing of paper, paperboard and pulp samples (Paper, board and pulps-Standard atmospheric conditions for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples)

ISO 5725-2 Measurement methods and accuracy of results (accuracy and precision) Part 2. Determination of repeatability of standard measurement methods

And the basic method of reproducibility
[Accuracy (trueness and precision) of measurement methods and results-Part

2 Basic method for the determination of repeatability and reproducibility of a standard measurement method]

method]

ISO /T R15510 stainless steel chemical composition (Stainless steels-Chemical composition)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Flowability

The time for a certain quality of powder to flow through the specified funnel.

Note. The mass of the powder is expressed in grams (g).

3.2

Flowrate

The mass of powder flowing through the specified funnel per unit time.

Note 1. The flow rate is expressed in grams per second (g/s).

Note 2. For simplification, "flow" is used to refer to "mass flow".

4 Principle

Add representative samples to the specified funnel, record the time required for all samples to flow out of the funnel, and determine the super absorbent powder of polyacrylate (PA)

End of liquidity. The mass of the sample is divided by the time to calculate the flow rate.