AS 1301.215:2019

Australian STANDARD®

Methods of test for pulp paper

Method 215: Pulps — Laboratory wet disintegration — Disintegration of mechanical pulps at ≥ 85 °C

STANDARDS Australia

AS 1301.215:2019

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Method 215: Pulps — Laboratory wet disintegration — Disintegration of mechanical pulps at ≥ 85 °C

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Revised and redesignated as AS 1301.215:2019.

Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee PK-019, Methods of Test for Pulp and Paper, to supersede AS/NZS 1301.215s:2007, *Method of test for pulp and paper, Method 215s: Removal of latency*.

The objective of this Standard is to specify an apparatus and the procedures for the laboratory wet disintegration of mechanical pulps that exhibit latency. This apparatus and procedure are required for preparation of the test portion in a number of other Standards dealing with pulps.

This Standard is applicable to all kind of mechanical pulps (i.e. mechanical, semi-chemical and chemo-mechanical pulps) exhibiting latency.

This Standard is identical with, and has been reproduced from, ISO 5263-3:2004, *Pulps — Laboratory wet disintegration — Part 3: Disintegration of mechanical pulps at ≥ 85 °C*.

As this document has been reproduced from an International Standard, the following applies:

(a) In the source text "this part of ISO 5263" should read "this Australian Standard".

(b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms "normative" and "informative" are used in Standards to define the application of the appendices or annexes to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 5263-3 was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps*, Subcommittee SC 5, *Test methods and quality specifications for pulps*.

This first edition cancels and partially replaces ISO 5263:1995 which has been technically revised. In the revision, ISO 5263 has been divided into three parts; Part 1 which is applicable to chemical pulps, Part 2 which is applicable to mechanical pulps without latency and Part 3 which is applicable to mechanical pulps exhibiting latency. In Part 3, an informative Annex has been inserted describing the effect of latency in mechanical pulps.

ISO 5263 consists of the following parts, under the general title *Pulps — Laboratory wet disintegration*:

— *Part 1: Disintegration of chemical pulps*

— *Part 2: Disintegration of mechanical pulps at 20 °C*

— *Part 3: Disintegration of mechanical pulps at ≥ 85 °C*

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Methods of test for pulp paper

Method 215: Pulps — Laboratory wet disintegration — Disintegration of mechanical pulps at ≥ 85 °C

1 Scope

This part of ISO 5263 specifies an apparatus and the procedures for the laboratory wet disintegration of mechanical pulps that exhibit latency. This apparatus and procedure are required for preparation of the test portion in a number of other International Standards dealing with pulps.

ISO 5263-3 is applicable to all kind of mechanical pulps (i.e. mechanical, semi-chemical and chemi-mechanical pulps) exhibiting latency. Mechanical pulps not exhibiting latency shall be disintegrated according to ISO 5263-2.

The procedure specified in ISO 5263-2 should be used to disintegrate all mechanical pulps to be measured for brightness.

NOTE Brightness is not significantly altered by the presence of latency; however, hot disintegration of mechanical pulps can lead to significant loss of brightness.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 638, *Pulps — Determination of dry matter content*

ISO 4119, *Pulps — Determination of stock concentration*

ISO 14487, *Pulps — Standard water for physical testing*

3 Definition

For the purposes of this part of ISO 5263, the following definitions apply.

3.1
disintegration of mechanical pulp
mechanical treatment in water so that interlaced fibres, which were free in the pulp stock, are again separated from one another without appreciably changing their structural properties

3.2
latency
condition of a mechanical pulp in which some of its properties are inhibited and require disintegration of the pulp at elevated temperature to be developed

Note 1 to entry: Latency is due to the distorted form of the fibres, acquired in mechanical processing, especially at high consistency, and subsequently preserved upon cooling at high consistency. It is assumed that its preservation is caused by the hardening of the lignin.

Note 2 to entry: The degree of latency in a pulp is generally related to the consistency and energy applied during the mechanical processing.