# **EESTI STANDARD**

Pulps - Laboratory wet disintegration - Part 3: Disintegration of mechanical pulps at  $\ge$  85°C (ISO 5263-3:2023)



### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

<ul> <li>See Eesti standard EVS-EN ISO 5263-3:2023</li> <li>sisaldab Euroopa standardi EN ISO 5263-3:2023</li> <li>ingliskeelset teksti.</li> <li>Standard on joustunud sellekohase teate avaldamisega EVS Teatajas.</li> <li>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 22.02.2023.</li> <li>Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.</li> <li>This standard is available from the Estonian Centre for Standardiation.</li> </ul>		
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	Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

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#### ICS 85.040

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# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

# EN ISO 5263-3

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ICS 85.040

Supersedes EN ISO 5263-3:2004

**English Version** 

### Pulps - Laboratory wet disintegration - Part 3: Disintegration of mechanical pulps at $\geq$ 85°C (ISO 5263-3:2023)

Pâtes - Désintégration humide en laboratoire - Partie 3: Désintégration des pâtes mécaniques à une température supérieure ou égale à 85 °C (ISO 5263-3:2023)

Faserstoffe - Nassaufschlagen im Labor - Teil 3: Aufschlagen von Holzstoff bei ≥ 85 °C (ISO 5263-3:2023)

This European Standard was approved by CEN on 11 February 2023.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

### **European foreword**

This document (EN ISO 5263-3:2023) has been prepared by Technical Committee ISO/TC 6 "Paper, board and pulps" in collaboration with Technical Committee CEN/TC 172 "Pulp, paper and board" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2023, and conflicting national standards shall be withdrawn at the latest by August 2023.

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

This document supersedes EN ISO 5263-3:2004.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

### **Endorsement notice**

The text of ISO 5263-3:2023 has been approved by CEN as EN ISO 5263-3:2023 without any modification.

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 172, *Pulp, paper and board,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 5263-3:2004), which has been technically revised.

The main changes are as follows:

 the requirement to reduce the temperature of the suspension immediately following disintegration has been made explicit.

A list of all parts in the ISO 5263 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u>.

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## Pulps — Laboratory wet disintegration —

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

### 1 Scope

This document specifies an apparatus and the procedures for the laboratory wet disintegration of mechanical pulps that exhibit latency except when brightness is measured. This apparatus and procedure can be used for preparation of the test portion in other International Standards dealing with pulps.

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

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 638-1, Paper, board, pulps and cellulosic nanomaterials — Determination of dry matter content by oven-drying method — Part 1: Materials in solid form

ISO 4119, Pulps — Determination of stock concentration

ISO 14487, Pulps — Standard water for physical testing

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <u>https://www.iso.org/obp</u>
- IEC Electropedia: available at <u>https://www.electropedia.org/</u>

#### 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.