# STN

## Papier tissue a výrobky tissue Časť 11: Určenie pevnosti v prietlaku za mokra pomocou gulôčky (ISO 12625-11: 2019)

STN EN ISO 12625-11

50 6301

Tissue paper and tissue products - Part 11: Determination of wet ball burst strength (ISO 12625-11:2019)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/19

Obsahuje: EN ISO 12625-11:2019, ISO 12625-11:2019

Oznámením tejto normy sa ruší STN EN ISO 12625-11 (50 6301) z júna 2013

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## EN ISO 12625-11

June 2019

ICS 85.080.20

Supersedes EN ISO 12625-11:2012

#### **English Version**

## Tissue paper and tissue products - Part 11: Determination of wet ball burst strength (ISO 12625-11:2019)

Papier tissue et produits tissues - Partie 11: Détermination de la résistance à l'éclatement à l'état humide, méthode à la balle (ISO 12625-11:2019) Tissue-Papier und Tissue-Produkte - Teil 11: Bestimmung der Nass-Berstfestigkeit mit einem Durchstoßkörper (ISO 12625-11:2019)

This European Standard was approved by CEN on 20 March 2019.

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.

CEN members are the national standards bodies of 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, Turkey and United Kingdom.



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

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

#### STN EN ISO 12625-11: 2019

## EN ISO 12625-11:2019 (E)

Contents	Page
European foreword	3

## **European foreword**

This document (EN ISO 12625-11:2019) 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 December 2019, and conflicting national standards shall be withdrawn at the latest by December 2019.

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 12625-11:2012.

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, Turkey and the United Kingdom.

#### **Endorsement notice**

The text of ISO 12625-11:2019 has been approved by CEN as EN ISO 12625-11:2019 without any modification.

# INTERNATIONAL STANDARD

180 12625-11

Second edition 2019-05

## Tissue paper and tissue products —

## Part 11:

# **Determination of wet ball burst strength**

Papier tissue et produits tissue —

Partie 11: Détermination de la résistance à l'éclatement à l'état humide, méthode à la balle



STN EN ISO 12625-11: 2019

ISO 12625-11:2019(E)



### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

## ISO 12625-11:2019(E)

Contents		Page
Forev	word	iv
Intro	oduction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Reagents	2
6 7 8	Apparatus 6.1 General 6.2 Clamping system 6.3 Penetration system 6.4 Force measuring system 6.5 Drive mechanism 6.6 Water application system  Sampling  Conditioning 8.1 General 8.2 Rapid ageing (curing)  Preparation of test pieces	
	9.1 General 9.2 Preparation of test pieces	5
10	Procedure	5
11	Calculation	6
12	Test report	
Annex A (informative) Precision		7
Annex B (informative) Adaptor		8
Bibliography		

#### **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>).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps*, Subcommittee SC 2, *Test methods and quality specifications for paper and board.* 

This second edition cancels and replaces the first edition (ISO 12625-11:2012), of which it constitutes a minor revision.

The main changes compared to the previous edition are as follows:

— <u>Clause 12</u>, addition of new "h)" stating "clamping ring diameter (89 mm or 50 mm)".

A list of all parts in the ISO 12625 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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

ISO 12625-11:2019(E)

## Introduction

This document is applicable to tissue papers and tissue products. In principle, application to other types of paper is possible, but is not covered by this document.

## Tissue paper and tissue products —

## Part 11:

## **Determination of wet ball burst strength**

#### 1 Scope

This document specifies a test method for the determination of the resistance to mechanical penetration (ball burst strength procedure) of tissue paper and tissue products after wetting.

#### 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 186, Paper and board — Sampling to determine average quality

ISO 187, Paper, board and pulps — Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples

ISO 7500-1, Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system

ISO 12625-1, Tissue paper and tissue products — Part 1: General guidance on terms

ISO 12625-9, Tissue paper and tissue products — Part 9: Determination of ball burst strength

koniec náhľadu – text ďalej pokračuje v platenej verzii STN