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#### Obaly Stanovenie stupňa dezintegrácie za simulovaných podmienok domáceho kompostovania

STN EN 17428

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Packaging - Determination of the degree of disintegration under simulated home composting conditions

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. 03/24

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 17428

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#### **English Version**

# Packaging - Determination of the degree of disintegration under simulated home composting conditions

Emballage - Détermination du degré de désintégration dans des conditions simulées de compostage domestique Verpackung - Bestimmung des Zersetzungsgrades unter simulierten Heimkompostierungsbedingungen

This European Standard was approved by CEN on 27 November 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

#### EN 17428-2:2023 (E)

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EN 17428-2:2023 (E)

#### **European foreword**

This document (EN 17428:2023) has been prepared by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by June 2024, and conflicting national standards shall be withdrawn at the latest by June 2024.

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.

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

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

#### EN 17428-2:2023 (E)

#### Introduction

The test method described in this document determines the degree of disintegration of test items when exposed to a simulated well-managed home composting environment.

The disintegration of test items is determined by means of a weight evaluation method.

Determining the degree of disintegration of test items under simulated home composting conditions is an important step within a test scheme to evaluate test items such as carrier bags suitable for treatment in well-managed home composting installations.

The disintegration conditions given in this document are based on available national standards and existing certification schemes. Further research will be done to investigate how disintegration testing according to this document could better reflect the variety of actual home composting conditions within Europe.

#### 1 Scope

This document specifies a laboratory scale test method for determining the degree of disintegration of test items when exposed to well-managed home composting conditions by the weight evaluation method (WE method) using sieving and evaluation by weighing.

The test method is not applicable for the determination of the biodegradability of test items under home composting conditions. Additional testing is necessary for making claims concerning the suitability for home composting. This document is not appropriate for claims relating to the suitability for home composting.

This test method is carried out at laboratory scale under controlled conditions. Therefore, it does not reproduce any real home composting conditions, but it is devised to gain information on the potential of the test item to disintegrate sufficiently. A test item that passes this test is assumed to be capable of undergoing full disintegration in a 12 months home composting cycle carried out under well managed conditions. For features of well-managed home composting see EN 17427:2022, Annex E.

#### 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.

EN 16087-1, Soil improvers and growing media — Determination of the aerobic biological activity — Part 1: Oxygen uptake rate (OUR)

EN 16087-2, Soil improvers and growing media — Determination of the aerobic biological activity — Part 2: Self heating test for compost

EN ISO 9073-1, Nonwovens — Test methods — Part 1: Determination of mass per unit area (ISO 9073-1)

EN ISO 534, Paper and board — Determination of thickness, density and specific volume (ISO 534)

EN ISO 536, Paper and board — Determination of grammage (ISO 536)

EN ISO 5084, Textiles — Determination of thickness of textiles and textile products (ISO 5084)

EN ISO 9073-2, Textiles — Test methods for nonwovens — Part 2: Determination of thickness (ISO 9073-2)

EN ISO 12625-6, Tissue paper and tissue products — Part 6: Determination of grammage (ISO 12625-6)

EN ISO 10390, Soil, treated biowaste and sludge — Determination of pH (ISO 10390)

ISO 3310-1, Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth

ISO 4591, Plastics — Film and sheeting — Determination of average thickness of a sample, and average thickness and yield of a roll, by gravimetric techniques (gravimetric thickness)

ISO 4593, Plastics — Film and sheeting — Determination of thickness by mechanical scanning

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