



SLOVENSKI STANDARD

SIST EN 643:2014

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Nadomešča:

SIST EN 643:2002

SIST EN 643:2002/AC:2003

Papir, karton in lepenka - Seznam evropskih standardnih vrst papirja, kartona in lepenke za recikliranje

Paper and board - European list of standard grades of paper and board for recycling

Papier und Pappe - Europäische Liste der Altpapier-Standardsorten

(standards.iteh.ai)

Papiers et cartons - Liste européenne des sortes standard de papiers et cartons pour recyclage

[SIST EN 643:2014](https://standards.iteh.ai/catalog/standards/sist/ae6cb8b6-9a5e-4404-966b-70909306062d/sist-en-643-2014)

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 643

January 2014

ICS 85.060

Supersedes EN 643:2001

English Version

**Paper and board - European list of standard grades of paper and
board for recycling**

Papiers et cartons - Liste européenne des sortes standard
de papiers et cartons pour recyclage

Papier, Karton und Pappe - Europäische Liste der
Altpapier-Standardsorten

This European Standard was approved by CEN on 6 December 2013.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
Foreword.....	3
Introduction	4
1 Scope	5
2 Terms and definitions	5
3 Group classification	6
4 Grade identification	6
5 General requirements.....	7
5.1 Source of the paper and board for recycling.....	7
5.2 Prohibited materials	7
5.3 Unwanted materials	7
5.4 Moisture content in paper and board for recycling.....	7
5.5 Form of delivery	7
5.6 Additional requirements for grades intended for deinking.....	8
5.6.1 Introduction	8
5.6.2 Age of newspapers	8
5.6.3 Paper products suitable for deinking.....	8
6 Classifications.....	8
6.1 Group 1, ordinary grades.....	8
6.2 Group 2, medium grades	9
6.3 Group 3, high grades.....	11
6.4 Group 4, kraft grades	13
6.5 Group 5, special grades	14
Bibliography.....	16

Foreword

This document (EN 643:2014) has been prepared by 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 July 2014 and conflicting national standards shall be withdrawn at the latest by July 2014.

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

This document supersedes EN 643:2001.

With regard to EN 643:2001, the following changes have been made:

- a) due to fundamental changes in waste legislation, the classification of grades has to be adapted (see introduction);
- b) the terminology has been modified to be in accordance with the use of the product for paper recycling;
- c) introduction in the classification tables of two new columns, one specifying the limits for non-paper components, and one specifying the limits of unwanted material;
- d) addition of “Bibliography”;
- e) editorial updating.

SIST EN 643:2014

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document, the European list of standard grades of paper and board for recycling, is intended to be used by industry professionals, organisations and individuals with an interest in the paper-recycling sector. It is intended to assist them in the buying and selling of these raw materials, which are intended for recycling by the paper and board industry without the need of additional sorting prior to use at a paper mill.

The definition for 'prohibited materials' and the limits for non-paper components provide guidance and support for Customs and Excise Officers who are required to differentiate these raw materials from waste in the context of supranational legislation on the control of waste shipments.

Furthermore, it is recommended that this document is used at all national levels in all official reports and in the day-to-day operation of companies. It secures the quality of the supply of paper and board for recycling to the paper mills through responsible sourcing of the paper industry's raw materials.

The major criterion is the use of the product for paper recycling. To take account of this criterion, the English terminology of EN 643 has been amended by substituting the term "Recovered paper and board" by "Paper and board for recycling" in the title and throughout the document.

The revision of EN 643 coincides with a fundamental change in waste legislation. The Waste Framework Directive (Directive 2008/98/EC [5]) introduces a procedure for defining End-of-Waste (EoW) criteria, which a given waste stream need to fulfil in order to cease to be waste.

The End-of-Waste criteria require compliance with EN 643, the provision of information on material that has ceased to be waste and the implementation of a quality management system.

It should be pointed out that the code numbers used to denote specific grades are not consecutive, as some grades have lost their importance in recent years. This affects grades 1.08, 1.10, 2.09 and 3.07. Wherever possible, the classification of grades was not changed compared to the previous version of this standard.

Finally, a limit for non-paper components is set for every grade, typically below 1,5 %, weight by weight. Much effort was given to the definition of tolerance levels for non-paper components and unwanted materials. The definition of tolerance levels reduces the need for individual agreements between buyer and supplier. However, specific agreements between individual buyers and suppliers may be used. Higher tolerances lead to non-standard grades.

This document has been prepared and supported by the following European organisations:

- CEPI Confederation of European Paper Industries;
- ERPA European Recovered Paper Association;
- FEAD European Federation of Waste Management and Environmental Service.

1 Scope

This European Standard defines grades of paper and board for recycling used as raw material for recycling in the manufacture of paper and board products in the paper industry.

This European Standard also specifies tolerances for unwanted materials as well as the composition of paper and board for recycling. Unusable materials (prohibited and unwanted materials) are clearly defined for all people involved in the management of paper and board for recycling.

2 Terms and definitions

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

2.1

paper and board for recycling

natural fibre based paper and board suitable for recycling and consisting of

- paper and board in any shape,
- products made predominately from paper and board, which may include other constituents that cannot be removed by dry sorting, such as coatings and laminates, spiral bindings, etc.

2.2

prohibited materials

any materials which represent a hazard for health, safety and environment, such as medical waste, contaminated products of personal hygiene, hazardous waste, organic waste including foodstuffs, bitumen, toxic powders and similar

2.3

non-paper components

any foreign matter in paper and board for recycling, which is not a constituent part of the product and can be separated by dry sorting, such as:

- metal;
- plastic;
- glass;
- textiles;
- wood;
- sand and building materials;
- synthetic materials

Note 1 to entry: Non paper components are part of the total amount of unwanted materials (see.2.7).

2.4

paper and board detrimental to production

those papers and boards which have been recovered or treated in such a way that they are, for a basic or standard level of equipment, unsuitable as raw material for the manufacture of new paper and board products, or are actually damaging, or whose presence makes the whole consignment of paper unusable

Note 1 to entry: For grades intended for deinking, all paper containing brown, unbleached fibres are considered detrimental to production.

EN 643:2014 (E)

Note 2 to entry: Some mills have developed their technology to handle grades, which are detrimental to production in standard processes; therefore, the range of paper and board capable of being recycled is increasing.

2.5
paper and board not according to grade definition
 paper and board or products thereof which are not included in the description of the specific grade of paper and board for recycling

Note 1 to entry: This could lead to regrading.

2.6
paper products suitable for deinking
 suitability for deinking is a characteristic of a printed-paper product

Note 1 to entry: For details on how to make this evaluation, see “*Assessment of Print Product Recyclability – Deinkability Score*” [3].

2.7
unwanted material
outhrows
 material not suitable for the production of paper and board

Note 1 to entry: The unwanted material may comprise:

- non-paper components;
 - paper and board detrimental to production;
 - paper and board not according to grade definition;
 - paper products not suitable for deinking (if applicable).
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3 Group classification

Paper and board for recycling is classified as follows:

- Group 1: Ordinary grades;
- Group 2: Medium grades;
- Group 3: High grades;
- Group 4: Kraft grades;
- Group 5: Special grades.

4 Grade identification

Grades of paper and board for recycling have been systematically numbered according to a numerical code system as follows:

Example for a designation: → paper grade → → EN°643 → → 2 → - → 03 → - → 01¶

Description: _____ ¶

Standard main number: _____ ¶

Group 2 (medium grade): _____ ¶

Grade 3 (lightly printed white shavings): _____ ¶

Subgrade 01 (lightly printed white shavings without glue): _____ ¶

In case of the main grades, replace the code of the subgrade by "00".

5 General requirements

5.1 Source of the paper and board for recycling

Paper and board mills may ask for a declaration from the supplier about the origin of the material, in relation to national regulations or standard requirements relating to paper and board for recycling.

The use of the "European Recovered Paper Identification System" (2008) is recommended.

Paper and board for recycling originating from multi-material collection systems, containing only material of a valuable, recyclable nature, shall be specifically marked. It is not permissible to mix it unmarked with other paper and board for recycling.

Paper sorted from refuse collections is not suitable for use in the paper industry.

5.2 Prohibited materials

Prohibited materials, as defined in 2.2 are not permitted at all.

5.3 Unwanted materials

In principle, paper and board for recycling should be supplied free of unwanted materials. The list of grades, however, specifies levels of tolerance for non-paper components and the total unwanted materials (outthrows). The total value of unwanted materials is the combined percentage of all unwanted materials defined in 2.7.

5.4 Moisture content in paper and board for recycling

In principle, paper and board for recycling will be supplied with moisture of not more than the naturally occurring level. Where the moisture content is higher than 10 % (of air-dried weight), the additional weight in excess of 10 % may be claimed back – with the method of testing and sampling to be agreed between buyer and seller.

5.5 Form of delivery

Shredding of paper and board for recycling should be avoided and thus be limited to reasons where confidentiality is required. If shredding cannot be avoided, the pieces should be left as large as possible.