

STN	Papier, lepenka a buničiny Meranie difúzneho činiteľa odrazu v modrej oblasti spektra Časť 1: Podmienky vnútorného denného svetla (belosť podľa ISO)	STN ISO 2470-1 50 0417
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Paper, board and pulps
Measurement of diffuse blue reflectance factor
Part 1: Indoor daylight conditions (ISO brightness)

Papier, carton et pâtes
Mesurage du facteur de réflectance diffuse dans le bleu
Partie 1: Conditions d'éclairage intérieur de jour (degré de blancheur ISO)

Táto slovenská technická norma obsahuje anglickú verziu medzinárodnej normy ISO 2470-1: 2016 a má postavenie oficiálnej verzie.

This Slovak standard includes the English version of the International standard ISO 2470-1: 2016 and has the status of the official version.

Nahradenie predchádzajúcich slovenských technických noriem

Táto slovenská technická norma nahrádza STN ISO 2470-1 zo septembra 2010 v celom rozsahu.

135439

Anotácia

Táto časť ISO 2470 špecifikuje metódu merania difúzneho činiteľa odrazu v modrej oblasti spektra (belosť podľa ISO) buničín, papierov a lepeniek.

Táto časť ISO 2470 sa obmedzuje na biele a takmer biele buničiny, papiere a lepenky. Meranie sa môže vykonať iba v prístroji, v ktorom bola úroveň ultrafialovej energie osvetlenia nastavená tak, aby zodpovedala zdroju svetla C^[6] podľa CIE s použitím fluorescenčného referenčného štandardu. Zdroj svetla C podľa CIE sa považuje za reprezentatívny pre vnútorné denné svetlo, pretože obsahuje vhodný podiel UV žiarenia.^[9]

POZNÁMKA. – Vlastnosť nazývaná belosť D65 sa meria prístrojom nastaveným tak, aby zodpovedal štandardnému zdroju svetla D65,^[4] podľa CIE, ktorý má oveľa vyšší obsah UV žiarenia, ako je obsah špecifikovaný v tejto časti ISO 2470. Meranie belosti D65 je opísané v ISO 2470-2.^[2]

Národný predhovor

Normatívne referenčné dokumenty

Nasledujúce dokumenty, celé alebo ich časti, sú v tomto dokumente normatívnymi odkazmi a sú nevyhnutné pri jeho používaní. Pri datovaných odkazoch sa použije len citované vydanie. Pri nedatovaných odkazoch sa použije najnovšie vydanie citovaného dokumentu (vrátane všetkých zmien).

POZNÁMKA 1. – Ak bola medzinárodná publikácia zmenená spoločnými modifikáciami, čo je indikované označením (mod), použije sa príslušná EN/HD.

POZNÁMKA 2. – Aktuálne informácie o platných a zrušených STN a TNI možno získať na webovom sídle www.unms.sk.

ISO 186 prijatá ako STN EN ISO 186 Papier a lepenka. Odber vzoriek na stanovenie priemernej kvality (ISO 186) (50 0302)

ISO 2469 prijatá ako STN ISO 2469 Papier, lepenka a buničiny. Meranie difúzneho činiteľa žiarivosti (faktor difúznej odrazivosti) (50 0418)

ISO 3688 prijatá ako STN ISO 3688 Buničiny. Príprava laboratórnych hárkov na meranie difúzneho činiteľa odrazu v modrej oblasti spektra (belosť podľa ISO) (50 0210)

ISO 4094 prijatá ako STN ISO 4094 Papier, lepenka a vlákny. Medzinárodná kalibrácia skúšobných prístrojov. Určenie a uznanie referenčných a oprávnených laboratórií (50 0010)

ISO 7213 prijatá ako STN EN ISO 7213 Buničiny. Odber vzoriek na skúšky (ISO 7213) (50 0202)

Vypracovanie slovenskej technickej normy

Spracovateľ: Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, Bratislava

Technická komisia: TK 90 Obaly, buničina, papier a lepenka

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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 www.iso.org/directives).

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 www.iso.org/patents).

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

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 6, *Paper, board and pulps*.

This second edition cancels and replaces the first edition (ISO 2470-1:2009), of which it constitutes a minor revision including the following modifications:

- references in [Clause 2](#) and in the Bibliography have been updated;
- the terminology ([Clause 3](#)) has been revised to be consistent with the information provided in ISO/TR 10688 and, wherever possible, with the symbols used in the CIE International Lighting Vocabulary;
- references to “ISO/TC 6 authorized laboratories” have been eliminated;
- the precision statement has been moved to an informative annex ([Annex C](#)).

ISO 2470 consists of the following parts, under the general title *Paper, board and pulps — Measurement of diffuse blue reflectance factor*:

- *Part 1: Indoor daylight conditions (ISO brightness)*
- *Part 2: Outdoor daylight conditions (D65 brightness)*

Introduction

The diffuse reflectance factor (radiance factor) depends on the conditions of measurement, particularly the spectral and geometric characteristics of the instrument used. This part of ISO 2470 is therefore intended to be read in conjunction with ISO 2469 which defines the geometric characteristics of the instrument and also defines the photometric calibration procedure to be adopted.

The definition of ISO brightness is historically linked to the Zeiss Elrepho instrument having, as a light source, an incandescent lamp which excites fluorescence to only a limited extent. It is specified here that, in instruments of the abridged spectrophotometer or filter colorimeter type, the UV content of the illumination be adjusted to conform to the CIE illuminant C as defined by a fluorescent reference standard having an assigned value of ISO brightness as described in [Annex B](#). Only if this is done can the property measured on a fluorescent material be called ISO brightness.

Paper, board and pulps — Measurement of diffuse blue reflectance factor —

Part 1: Indoor daylight conditions (ISO brightness)

1 Scope

This part of ISO 2470 specifies a method for measuring the diffuse blue reflectance factor (ISO brightness) of pulps, papers and boards.

This part of ISO 2470 is limited in its scope to white and near-white pulps, papers and boards. The measurement can only be made in an instrument in which the ultraviolet energy level of the illumination has been adjusted to correspond to the CIE illuminant C^[6] using a fluorescent reference standard. The CIE illuminant C is taken to be representative of indoor daylight conditions because it contains a suitable proportion of UV radiation.^[9]

NOTE The property called D65 brightness is measured with an instrument adjusted to correspond with CIE standard illuminant D65,^[4] which has a much higher UV content than that specified in this part of ISO 2470. The measurement of D65 brightness is described in ISO 2470-2.^[2]

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 2469, *Paper, board and pulps — Measurement of diffuse radiance factor (diffuse reflectance factor)*

ISO 3688, *Pulps — Preparation of laboratory sheets for the measurement of diffuse blue reflectance factor (ISO brightness)*

ISO 4094, *Paper, board and pulps — International calibration of testing apparatus — Nomination and acceptance of standardizing and authorized laboratories*

ISO 7213, *Pulps — Sampling for testing*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN