

Third edition
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Tissue paper and tissue products — Part 7: Determination of optical properties — Measurement of brightness and colour with D65/10° (outdoor daylight)

Papier tissue et produits tissue —

Partie 7: Détermination des propriétés optiques — Mesurage du degré de blancheur et de la couleur en D65/10° (lumière du jour extérieure)



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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).

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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*, 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 third edition cancels and replaces the second edition (ISO 12625-7:2014), which has been technically revised.

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

- alternative formulae in [11.2.1](#) have been removed because they were not relevant for tissue paper.

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 www.iso.org/members.html.

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Introduction

Brightness and colour measurement can be performed under various illumination and observation conditions. This document deals with D65/10° conditions, which refer to an outdoor daylight.

C/2° conditions (indoor daylight) are considered in ISO 12625-15. Although both International Standards deal with brightness and colour, results obtained are usually different and do not correlate.

Optical measurement is affected by the geometry of the instruments used and by the texture of the material. The design of the instrument to use according to this document and the routine to adopt for its calibration are specified in ISO 2469 and ISO 11475.

The optical properties are related to the visual appearance of the material. Therefore, although optical properties are intrinsic properties of tissue paper, they are not functional properties.

Brightness should not be confused with the optical property called CIE whiteness, which is based on reflectance data obtained over the full visible spectral range (VIS) in contrast to the measurement of brightness, which is limited to the blue region of VIS.

Due to its importance for some countries, three different test methods for the determination of optical properties were developed:

- this document, i.e. ISO 12625-7;
- ISO 12625-15;
- ISO 12625-16.