International

ISO 12625-16

Tissue paper and tissue products —

Part 16: Determination of optical properties — Diffuse reflectance method for opacity (paper backing)

Papier tissue et produits tissue —

Partie 16: Détermination des propriétés optiques — Méthode par réflectance diffuse de l'opacité sur fond papier

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This second edition cancels and replaces the first edition (ISO 12625-16:2015), which has been technically revised.

The main changes are as follows:

— Information has been added to Annex A to explain calculations for instruments with bandpass correction; Table A.2 provides weighting functions needed for calculations related to instruments with bandpass correction.

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Optical measurements are affected by the geometry of the instruments used and by the texture of the material.

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

The opacity value depends on the principle used for its evaluation, and a method should be chosen which most closely relates to the interpretation to be placed upon the results. The method described in this document is applicable when it is desired to measure that property of a tissue paper or tissue product which governs the extent to which one sheet visually obscures print on underlying sheets. It should not be confused with methods based on the reduction in a standard contrast by interposition of the paper opacity (white backing), formerly known as contrast ratio, nor with the assessment of the amount and condition of light penetrating a sheet (transparency or translucency).

The calculation of opacity requires luminance-factor data obtained by measurement under specified conditions. The luminance factor depends on the conditions of measurement, and particularly on the spectral and geometric characteristics of the instrument used for its determination.