Analytical colorimetry - Part 3: Special indices (ISO 18314-3:2015)

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 18314-3:2018 sisaldab Euroopa standardi EN ISO 18314-3:2018 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 18314-3:2018 consists of the English text of the European standard EN ISO 18314-3:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 03.10.2018.	Date of Availability of the European standard is 03.10.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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Analytical colorimetry - Part 3: Special indices (ISO 18314-3:2015)

Analyse colorimétrique - Partie 3: Indices spéciaux (ISO 18314-3:2015)

Analytische Farbmessung - Teil 3: Spezielle Indices (ISO 18314-3:2015)

This European Standard was approved by CEN on 19 February 2018.

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

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European foreword

The text of ISO 18314-3:2015 has been prepared by Technical Committee 256 "Pigments, dyestuffs and extenders"of the International Organization for Standardization (ISO) and has been taken over as EN ISO 18314-3:2018 by Technical Committee CEN/TC 298 "Pigments and extenders" 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of an identical text or by endorsement, at the latest by April 2019, and conflicting national standards shall be withdrawn at the latest by April 2019.

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Endorsement notice

The text of ISO 18314-3:2015 has been approved by CEN as EN ISO 18314-3:2018 without any modification.

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Foreword

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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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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 WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 256, *Pigments, dyestuffs and extenders.*

ISO 18314 consists of the following parts, under the general title *Analytical colorimetry*:

— *Part 1: Practical colour measurement*

— *Part 2: Saunderson correction, solutions of the Kubelka-Munk equation, tinting strength, hiding power*

— *Part 3: Special indices*

Analytical colorimetry —

Part 3:
Special indices

1 Scope

This part of ISO 18314 specifies different methods of calculating special indices, which are generally used to describe lightness respectively jetness of samples including chroma or hue within one colour-coordinate.

This part of ISO 18314 is applicable to tristimulus values and chromaticity coordinates calculated using colour-matching functions of the CIE 1964 standard colourimetric system. It can be used for the specification of colour stimuli perceived as belonging to a reflecting or transmitting object, where a one-dimensional value is required.

2 Symbols and abbreviated terms

a, b	absolute parameters
FI	flop-index
G_C	colour depending grey value
G_Y	grey value
Gyr	relative grey value
$G_Y\,(GS)$	grey value of a virtual general standard
$G_Y\,(GS_f)$	fixed mean value (of 10 preparations) of the actual general standard
$G_Y\,(GS_v)$	grey value of the actual prepared general standard
G_Y (Sample)	grey value of the sample
$L^*(\varepsilon)$	CIELab-76 lightness value at the aspecular angle ε
M_C	colour depending black value
M_Y	black value
Myr	relative black value
$M_Y\,(GS)$	black value of a defined virtual general standard
$M_Y\,(GS_f)$	fixed mean value (of 10 preparations) of the actual group standard
$M_Y\,(GS_v)$	black value of the actual prepared group standard
M_Y (Sample)	black value of the sample
W_{CIE}	is the CIE whiteness index
X, Y, Z	tristimulus values of a test stimulus