

ISO 18314-2:2015-06 (E)

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

Contents		Page
Foreword		iv
1	Scope	1
2	Terms, definitions, symbols, and abbreviated terms	1
2.1	Terms and definitions	1
2.2	Symbols and abbreviated terms	2
3	Saunderson correction	4
3.1	General	4
3.2	Incidence diffuse, observation 0° (d/0°)	4
3.3	Incidence 45°, observation 0° (45°: 0°)	4
4	Solution of the Kubelka-Munk equations	5
5	Determination of relative tinting strength and residual colour difference of coloured pigments	6
5.1	General	6
5.2	Principle	6
5.3	Procedure	6
5.3.1	General	6
5.3.2	Evaluation of absorption at the absorption maximum	7
5.3.3	Evaluation of the weighted K/S sum	7
5.3.4	Evaluation by equalizing the tristimulus value, Y	8
5.3.5	Evaluation by equalizing the smallest of the tristimulus values X, Y, and Z	8
5.3.6	Evaluation by equalizing the shade depth	9
6	Determination of hiding power of pigmented media	10
6.1	General	10
6.2	Example for white or light coloured paints with a contrast ratio of 0,98 as hiding power criterion	11
7	Repeatability and reproducibility	12
8	Test report	12
Annex A (normative) Tables of coefficients for calculating a() values (standard illuminant D65 and 10° standard observer)		13
Annex B (normative) Tables of coefficients for calculating a() values (standard illuminant C and 2° standard observer)		15
Bibliography		17