

DIN EN ISO 6504-1:2019-09 (E)

Paints and varnishes - Determination of hiding power - Part 1: Kubelka-Munk method for white and light-coloured paints (IS O 6504-1:2019)

Contents	Page
European foreword.....	4
Foreword.....	5
Introduction	6
1 Scope.....	7
2 Normative references.....	7
3 Terms and definitions	7
4 Principle	7
5 Kubelka-Munk equations.....	8
6 Apparatus and materials.....	9
6.1 Substrates	9
6.1.1 Determination of R_B	9
6.1.2 Determination of R_∞	10
6.2 Film applicators.....	10
6.3 Reflectometer	10
6.4 Template	10
7 Limitations.....	10
8 Sampling.....	10
9 Procedure.....	10
9.1 Determination of R_∞	10
9.2 Determination of R_B	11
9.2.1 Preparation of test films.....	11
9.2.2 Measurement of reflectance R_B	11
9.3 Determination of film thickness.....	12
9.3.1 General.....	12
9.3.2 Method using polyester film	12
9.3.3 Method using black glass plates.....	12
10 Expression of results.....	12
10.1 Calculation of wet film thickness.....	12
10.2 Calculation of hiding power	13
11 Precision.....	13
11.1 Repeatability (r).....	13
11.2 Reproducibility (R).....	13
12 Test report.....	13
Annex A (informative) Graphs for determination of St from R_B and R_∞ for $R_g = 0,80$	14
Annex B (informative) Table of values of reflectivity R_∞ and factor α for $R_g = 0,80$	39

Annex C (informative) Examples of the calculation of hiding power from measurements of R_B and R_∞	40
C.1 Determination of the scattering coefficient, S	40
C.2 Determination of hiding power, V	40
Bibliography	42