INTERNATIONAL STANDARD

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Paints and varnishes — Evaluation of quantity and size of defects, and of intensity of uniform changes in appearance —

Part 6: Assessment of degree of chalking by tape method

Peintures et vernis — Évaluation de la quantité et de la dimension des défauts, et de l'intensité des changements uniformes d'aspect —

Partie 6: Évaluation du degré de farinage par la méthode du ruban adhésif

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Foreword

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This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 139, *Paints and varnishes*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 4628-6:2011), which has been technically revised. The main changes are as follows:

— the title has been shortened;

— the definition of chalking (3.1) has been changed to the entry in ISO 4618:2023;

— the normative references have been updated.

A list of all parts in the ISO 4628 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.

Introduction

ISO 4628-1 specifies the system for designating the quantity and size of defects and the intensity of uniform changes of coatings, and outlines the general principles of the system. This system is intended to be used especially for defects caused by ageing and weathering, and for uniform changes such as colour changes, for example yellowing.

The other parts of the ISO 4628 series provide pictorial standards or other means for evaluating particular types of defect. As far as possible, already existing evaluation schemes have been used as the basis.

The chalking scale used in the first edition (i.e. ISO 4628-6:1990[1)], Figure 1), in the third edition (i.e. ISO 4628-6:2011[1)], Figure 1) and in this document, consists of photographic pictures of adhesive tapes with different amounts of pigment particles adhering to them. The pigment particles are not evenly distributed over each tape. The lower ratings in particular (i.e. 1 to 3) give the impression of cloudiness. Nevertheless, all five ratings in the scale used in the first edition (ISO 4628-6:1990) and in this document are sufficiently different for visual-assessment purposes.

The scale used in the second edition (i.e. ISO 4628-6:2007[1)], Figure 1) was computer-generated. Thus, the white dots representing the pigment particles were distributed very evenly over the tape, with the result that not all the ratings differed sufficiently well from each other for visual assessment to be carried out. While ratings 0,5 to 3,0 on the black background on the scale in ISO 4628-6:2007 could be differentiated sufficiently well from each other, it was hardly possible to visually differentiate between ratings above 3,0, especially ratings 4 and 5. On the white background, the difference between ratings 0,5, 1,0 and 1,5 was not easy to discern. The differences between ratings 1,5 to 5,0 were more evident, however.

Comparing the scale in ISO 4628-6:1990 with the scale in ISO 4628-6:2007, it would appear that rating 1 on the scale in ISO 4628-6:1990 corresponded to 0,5 on the scale in ISO 4628-6:2007, and rating 2 on the scale in ISO 4628-6:1990 corresponded to 1 on the scale in ISO 4628-6:2007.

It was therefore decided that the scale in ISO 4628-6:2007 was unsuitable for use in the visual assessment of the degree of chalking of paints over the whole rating scale from 0,5 to 5,0.

1) Withdrawn.