Second edition 2016-03-15

Paints and varnishes — Determination of resistance to abrasion —

Part 3:

Method with abrasive-paper covered wheel and linearly reciprocating test specimen

Peintures et vernis — Détermination de la résistance à l'abrasion —

Partie 3: Méthode utilisant une roue revêtue de papier abrasif et une éprouvette animée d'un mouvement de va-et-vient linéaire



Reference number ISO 7784-3:2016(E)



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

This second edition cancels and replaces the first edition (ISO 7784-3:2000), which has been technically revised with the following changes:

- a) the title has been changed;
- b) the terms and definitions clause has been amended:
- c) a figure explaining the principle of the method was amended;
- d) the supplementary test conditions previously in Annex A have been integrated in the test report;
- e) the calibration of the apparatus previously in Annex B has been deleted;
- f) the test procedure has been re-arranged;
- g) the text has been editorially revised and the normative references have been updated.

ISO 7784 consists of the following parts, under the general title *Paints and varnishes* — *Determination of resistance to abrasion*:

- Part 1: Method with abrasive-paper covered wheels and rotating test specimen
- Part 2: Method with abrasive rubber wheels and rotating test specimen
- Part 3: Method with abrasive-paper covered wheel and linearly reciprocating test specimen

Introduction

This part of ISO 7784 is one of the three parts of ISO 7784 dealing with test methods for the determination of the resistance to abrasion of coatings using abrasive wheels. The characteristics and differences of these methods are summarized in <u>Table 1</u>.

Table 1 — Types of method

| Standard | Abrasive wheel | | Test specimen |
|------------|--------------------------------|---|----------------------|
| Standard | Туре | Degree of freedom | movement |
| ISO 7784-1 | Abrasive paper on rubber wheel | Freely rotatable | Rotation |
| ISO 7784-2 | Abrasive rubber wheel | - | |
| ISO 7784-3 | Abrasive paper on metal wheel | Rigid – with stroke-dependent rotation ^a | Linear reciprocation |

^a A mechanism rotates the abrasive wheel by a small angle after each double stroke so that a new area of the abrasive paper is effective.

The methods using abrasive-paper covered wheels (ISO 7784-1 and ISO 7784-3) are preferably to be applied.