



SLOVENSKI STANDARD SIST EN ISO 1522:2023

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Nadomešča:

SIST EN ISO 1522:2007

Barve in laki - Preskus trdote z dušenjem nihanja (ISO 1522:2022)

Paints and varnishes - Pendulum damping test (ISO 1522:2022)

Beschichtungsstoffe - Pendeldämpfungsprüfung (ISO 1522:2022)

Peintures et vernis - Essai d'amortissement du pendule (ISO 1522:2022)

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87.040

Barve in laki

Paints and varnishes

SIST EN ISO 1522:2023

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EUROPEAN STANDARD

EN ISO 1522

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 87.040

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English Version

Paints and varnishes - Pendulum damping test (ISO 1522:2022)

Peintures et vernis - Essai d'amortissement du pendule
(ISO 1522:2022)

Beschichtungsstoffe - Pendeldämpfungsprüfung (ISO 1522:2022)

This European Standard was approved by CEN on 12 November 2022.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN ISO 1522:2022) has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" in collaboration with Technical Committee CEN/TC 139 "Paints and varnishes" 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of an identical text or by endorsement, at the latest by May 2023, and conflicting national standards shall be withdrawn at the latest by May 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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The text of ISO 1522:2022 has been approved by CEN as EN ISO 1522:2022 without any modification.

INTERNATIONAL
STANDARD

ISO
1522

Fourth edition
2022-11

**Paints and varnishes — Pendulum
damping test**

Peintures et vernis — Essai d'amortissement du pendule

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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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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

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 1522:2006), which has been technically revised.

The main changes are as follows:

- [Clause 3](#) “Terms and definitions” has been added.
- The recommendation of using metal or glass panels has been removed from [7.1](#) because the test method is also usable for other substrate materials, e.g. plastics.
- The precision statement of the König Pendulum in [10.1](#) has been corrected reflecting the test conditions and results of the interlaboratory comparison in 2006.
- In [5.1.3](#) and in [B.3.2](#) the tolerance for the time for the amplitude of swing to decrease from 12° to 4° has been changed back to ±10 s, as it was in the second edition (ISO 1522:1998).
- The calibration of the pendulum has been added with a test for deformation.
- The text has been editorially revised and the normative references have been updated.

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

This document considers in detail two test procedures for pendulum damping tests, König and Persoz. The instruments embody the same principle, i.e. that the amplitude of oscillation of a pendulum touching a surface decreases more rapidly the softer the surface, but differ in respect of dimensions, period and amplitude of oscillation.

The interaction between the pendulum and the paint film is complex, depending as it does on both elastic and viscoelastic properties, and it is not possible to establish a general relationship between results obtained by the two tests. Therefore, only one type of pendulum should be used in a given series of measurements of damping time.

The following considerations may serve as a guide when considering which pendulum may offer an advantage for a particular purpose.

- a) On surfaces with a low coefficient of friction, the Persoz pendulum may skid, which would invalidate results; however, this occurs only rarely with paints and varnishes.
- b) It should be noted that both instruments reflect the sensitivity of the physical properties of a paint to its environment, and the test therefore should be under controlled conditions of temperature and humidity and in the absence of draughts. The thickness of the paint film and the nature of the substrate may also affect the damping times.

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