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Paints and varnishes - Electro-deposition coatings - Part 9: Stoving loss (ISO 22553-9:2020)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.09.2021.	Date of Availability of the European standard is 01.09.2021.
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ICS 87.040

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 22553-9

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English Version

Paints and varnishes - Electro-deposition coatings - Part 9: Stoving loss (ISO 22553-9:2020)

Peintures et vernis - Peintures d'électrodéposition - Partie 9: Perte par d'étuvage (ISO 22553-9:2020)

Beschichtungsstoffe - Elektrotauchlacke - Teil 9: Einbrennverlust (ISO 22553-9:2020)

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European foreword

The text of ISO 22553-9:2020 has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 22553-9:2021 by 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of an identical text or by endorsement, at the latest by March 2022, and conflicting national standards shall be withdrawn at the latest by March 2022.

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Endorsement notice

The text of ISO 22553-9:2020 has been approved by CEN as EN ISO 22553-9:2021 without any modification.

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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 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*.

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Introduction

The stoving loss of an electro-deposition coating is not an absolute parameter but instead depends on the temperature used during testing and the test duration. As a result, relative values alone and not the true values for the stoving loss are obtained when using this method.

The relative mass loss factor, the relative reaction loss factor, and the relative total stoving loss factor can be calculated relative to the coated and vented, pre-dried and stoved test panel. The calculation is specified in Annex A.

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Paints and varnishes — Electro-deposition coatings —

Part 9: Stoving loss

1 Scope

This document specifies a method for determining the volatile-matter content of electro-deposition coatings (e-coats) during stoving (stoving loss) used for automotive industries and other general industrial applications, e.g. chiller units, consumer products, radiators, aerospace, agriculture.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1514, *Paints and varnishes — Standard panels for testing*

ISO 4618, *Paints and varnishes — Terms and definitions*

ISO 22553-1, *Paints and varnishes — Electro-deposition coatings — Part 1: Vocabulary*

ISO 23321, *Solvents for paints and varnishes — Demineralized water for industrial applications — Specification and test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4618 and ISO 22553-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Principle

The non-volatile matter is determined after stoving of the electro-deposition coating and the stoving loss is calculated from this.

5 Apparatus and materials

Typical laboratory apparatus, together with the following:

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