

# SLOVENSKI STANDARD oSIST prEN ISO 22553-3:2020

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Barve in laki - Nanašanje premazov z elektrodepozicijo - 3. del: Združljivost elektrodepozicijskih premazov z referenčnim oljem (ISO 22553-3:2019)

Paints and varnishes - Electro-deposition coatings Part 3: Compatibility of electro-deposition coating materials with a reference oil (ISO 22553-3:2019)

Beschichtungsstoffe - Elektrotauchlacke - Teil 3: Verträglichkeit von Elektrotauchlacken mit einem Referenzöl (ISO 22553-3:2019)

Peintures et vernis - Peintures d'électrodéposition - Partie 3: Compatibilité des peintures d'électrodéposition avec d'une huile référence (ISO 22553-3:2019)

Ta slovenski standard je istoveten zapreN ISO 22553-3

ICS:

87.040 Barve in laki Paints and varnishes

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# **INTERNATIONAL STANDARD**

**ISO** 22553-3

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# Paints and varnishes — Electro-deposition coatings —

Part 3:

Compatibility of electro-deposition coating materials with a reference oil

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Partie 3: Compatibilite
huile référence Peintures et vernis — Peintures d'électrodéposition — Partie 3: Compatibilité des peintures d'électrodéposition avec d'une

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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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

A list of all parts in the ISO 22553 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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

## Introduction

In practice, surface-reactive substances often contaminate the electro-deposition coating material inside the tank. These contaminants could be materials that are used in downstream production processes, e.g. forming additives, corrosion protection oils and chain lubricants.

These surface-active substances can lead to surface defects in the e-coat and/or subsequent coats.

Test methods for the determination of the compatibility of electro-deposition coating materials with liquid, paste-like and solid foreign substances, which influence the properties of the electro-deposition coating, are described in ISO 22553-4.

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# Paints and varnishes — Electro-deposition coatings —

## Part 3:

# Compatibility of electro-deposition coating materials with a reference oil

## 1 Scope

The document specifies a method for the determination of the compatibility of electro-deposition coating materials with a reference oil.

It is applicable to electro-deposition coatings 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 2808, Paints and varnishes Determination of film thickness

ISO 4618, Paints and varnishes — Terms and definitions

ISO 13076, Paints and varnishes — Lighting and procedure for visual assessments of coatings

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, ISO 22553-1 and the following apply.

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

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 3.1

#### surface active agent

surfactant

substance that affects the interfacial or surface tension markedly, when present in very low concentrations

[SOURCE: ISO 2080:2008, 3.187]