
**Paints and varnishes —
Electro-deposition coatings —**

Part 4:

**Compatibility of electro-deposition
coating materials with liquid, paste-
like and solid foreign materials**

*Peintures et vernis — Peintures d'électrodéposition —
Partie 4: Compatibilité des peintures d'électrodéposition avec des
matières liquides, pâteuses et solides*

[ISO 22553-4:2019](https://standards.iteh.ai/catalog/standards/iso/a51824e3-0803-4d45-b42c-7d5873612433/iso-22553-4-2019)

<https://standards.iteh.ai/catalog/standards/iso/a51824e3-0803-4d45-b42c-7d5873612433/iso-22553-4-2019>



iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ISO 22553-4:2019](https://standards.iteh.ai/catalog/standards/iso/a51824e3-0803-4d45-b42c-7d5873612433/iso-22553-4-2019)

<https://standards.iteh.ai/catalog/standards/iso/a51824e3-0803-4d45-b42c-7d5873612433/iso-22553-4-2019>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principles	2
5 Apparatus and materials	2
6 Reagents	3
7 Foreign materials	3
8 Test panels	3
9 Method A — Direct contamination	3
9.1 Blank test	3
9.2 Number of determinations	4
9.3 Contamination of the electro-deposition tank with foreign material	4
9.3.1 Liquid foreign material	4
9.3.2 Paste-like foreign material	4
9.3.3 Solid foreign materials	5
9.4 Coating of the test panels	6
9.5 Evaluation	6
10 Method B — Contact contamination	6
10.1 Blank test	6
10.2 Number of determinations	6
10.3 Contamination of the test panels	6
10.4 Coating of the test panels	6
10.5 Evaluation	7
11 Method C — Contamination during the stoving process	7
11.1 Blank test	7
11.2 Number of determinations	7
11.3 Coating of the test panel	7
11.4 Preparation of the base panel with the foreign material	7
11.5 Stoving of the test specimens	8
11.6 Evaluation	8
12 Precision	8
13 Test report	9
Bibliography	10

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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*.

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 www.iso.org/members.html.

Introduction

During the electro-deposition coating process, foreign materials used in downstream production processes pass through the electro-deposition coating tank. Consequently, contamination of the electro-deposition coating tank material or defects in the surface of the coating can occur. Foreign materials can be, for example, oils, adhesives, insulating material and plastic building components.

Test methods for determining the compatibility of electro-deposition coating materials with a reference oil, which influences the properties of the electro-deposition coating, are described in ISO 22553-3.

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ISO 22553-4:2019](https://standards.iteh.ai/catalog/standards/iso/a51824e3-0803-4d45-b42c-7d5873612433/iso-22553-4-2019)

<https://standards.iteh.ai/catalog/standards/iso/a51824e3-0803-4d45-b42c-7d5873612433/iso-22553-4-2019>

