

### SLOVENSKI STANDARD SIST-TP CEN ISO/TR 15235:2025

01-januar-2025

Priprava jeklenih podlag pred nanašanjem barv in sorodnih premazov - Zbrane informacije o vplivu stopnje onesnaženja s solmi, topnimi v vodi (ISO/TR 15235:2001)

Preparation of steel substrates before application of paints and related products - Collected information on the effect of levels of water-soluble salt contamination (ISO/TR 15235:2001)

Vorbereitung von Stahloberflächen vor dem Auftragen von Beschichtungsstoffen und verwandten Produkten - Gesammelte Informationen über die Auswirkungen der Verunreinigung durch wasserlösliche Salze (ISO/TR 15235:2001)

Préparation des subjectiles d'acier avant application de peintures et de produits assimilés - Conseils sur les teneurs en contamination des sels solubles dans l'eau (ISO/TR 15235:2001)

Ta slovenski standard je istoveten z: CEN ISO/TR 15235:2024

ICS:

87.020

25.220.10 Priprava površine

Postopki za nanašanje

barvnih premazov

Surface preparation

Paint coating processes

SIST-TP CEN ISO/TR 15235:2025

en

SIST-TP CEN ISO/TR 15235:2025

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

SIST-TP CEN ISO/TR 15235:2025

# TECHNICAL REPORT RAPPORT TECHNIQUE TECHNISCHER REPORT

**CEN ISO/TR 15235** 

October 2024

ICS 25.220.10

#### **English Version**

Preparation of steel substrates before application of paints and related products - Collected information on the effect of levels of water-soluble salt contamination (ISO/TR 15235:2001)

Préparation des subjectiles d'acier avant application de peintures et de produits assimilés - Conseils sur les teneurs en contamination des sels solubles dans l'eau (ISO/TR 15235:2001) Vorbereitung von Stahloberflächen vor dem Auftragen von Beschichtungsstoffen und verwandten Produkten - Gesammelte Informationen über die Auswirkungen der Verunreinigung durch wasserlösliche Salze (ISO/TR 15235:2001)

This Technical Report was approved by CEN on 27 October 2024. It has been drawn up by the Technical Committee CEN/TC 139.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

### Document Preview

SIST-TP CEN ISO/TR 15235:2025

https://standards.iteh.ai/catalog/standards/sist/6fcb10d0-6b13-42b5-9cfd-0c6952e80fb1/sist-tp-cen-iso-tr-15235-202



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

### CEN ISO/TR 15235:2024 (E)

Contents	Page
Francis con formand	2
European Ioreword	

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

SIST-TP CEN ISO/TR 15235:2025

### **European foreword**

The text of ISO/TR 15235:2001 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 CEN ISO/TR 15235:2024 by Technical Committee CEN/TC 139 "Paints and varnishes" the secretariat of which is held by DIN.

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.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

### **Endorsement notice**

The text of ISO/TR 15235:2001 has been approved by CEN as CEN ISO/TR 15235:2024 without any modification.

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

SIST-TP CEN ISO/TR 15235:2025

SIST-TP CEN ISO/TR 15235:2025

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

SIST-TP CEN ISO/TR 15235:2025

## TECHNICAL REPORT

ISO/TR 15235

First edition 2001-10-15

Preparation of steel substrates before application of paints and related products — Collected information on the effect of levels of water-soluble salt contamination

Préparation des subjectiles d'acier avant application de peintures et de produits assimilés — Conseils sur les teneurs en contamination des sels solubles dans l'eau

(https://standards.iteh.ai)
Document Preview

SIST-TP CEN ISO/TR 15235:2025

/https://standards.iteh.ai/catalog/standards/sist/6fcb10d0-6b13-42b5-9cfd-0c6952e80fb1/sist-tp-cen-iso-tr-15235-202



Reference number ISO/TR 15235:2001(E)

#### ISO/TR 15235:2001(E)

#### PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

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

<u> SIST-TP CEN ISO/TR 15235:2025</u>

https://standards.iteh.ai/catalog/standards/sist/6fch10d0-6h13-42h5-9cfd-0c6952e80fb1/sist-tp-cen-iso-tr-15235-202

#### © ISO 2001

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

### ISO/TR 15235:2001(E)

Cont	rents Pa	ge
Forewo	ord	.iv
Introdu	uction	<b>v</b>
1	Scope	1
2	Conclusions	1
3	Terms and definitions	2
4	Sequential collection of data	2
5	Protocol for assessing surface contamination	5
6	Recommended test protocol to investigate the influence of salt contamination on coating service life	5
7	Other standards of interest	5
Annex A (informative) Summary of data from bibliographic references		6
Annex B (informative) Data from a paint manufacturer14		14
Annex	C (informative) Coating-system manufacturers' recommendations regarding toleration of salt contamination on a steel surface before application of paints or related products	16
Annex	D (informative) Data supplied by Japan (see 4.2)	19
Annex	E (informative) Assessment of soluble chloride and/or sulfate contamination on a steel surface — Surface inspection protocol	21
Annex	F (informative) Recommended test procedure when investigating the influence of soluble chloride and/or sulfate contamination on coating service life	22
Bibliog	graphyli/tulg/.stdoi.d./doi.d.10.d0.d1.10.42b5.00f1.006052080f1.1/st.tpictu.1522	23

#### ISO/TR 15235:2001(E)

### **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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

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

ISO/TR 15235 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 12, *Preparation of steel substrates before application of paints and related products*.

SIST-TP CEN ISO/TR 15235:2025

### Introduction

The performance of paints and related products applied to steel can be significantly affected by the presence of water-soluble salt contaminants on a steel surface.

Sources of salt contamination are numerous. In the painting industry, the blasting abrasive itself, the paint ingredients (particularly pigments), and the rinse water that may be used in wet cleaning methods can all be sources of salt contamination. In addition, salts settle from the atmosphere during fogs, dews, inversions, and rain, and they may also be deposited from chemical splashes or air pollutants. De-icing salts, which are used on highways and bridges in cold climates, may remain on the steel surfaces. Furthermore, some steel surfaces, during service, come into direct contact with salts, e.g. ships carrying salt water ballast in steel tanks or vessels with salt-containing cargoes.

Unless salts are removed from a steel surface prior to painting, problems may occur that lead to poor paint performance. Salts on the steel surface can absorb moisture from the air, cause osmotic blistering of the paint system, and accelerate the rate of corrosion.

Removal of salts is often difficult, and the salts accelerate pitting corrosion. The salt contaminant can remain in the bottom of pits, often beneath the corrosion product. In order to adequately remove salts from the surface, it is often necessary not only to remove the corrosion product, but also to flush the salt from within the corrosion pits.

The performance of a paint system applied over a salt-contaminated surface depends on the service environment, the type and design of the paint system, the thickness of the paint, and the nature and amount of salt contaminants.

International Standards ISO 8501 and ISO 8502 have been prepared to provide methods of assessing visually or by chemical analysis the presence and surface concentration of contaminants, and ISO 8504 provides guidance on methods for cleaning steel surfaces. These International Standards, however, do not contain guidance on the levels of salt contamination that can be tolerated by paint systems.

This document provides information on the levels of water-soluble chloride and sulfate salt contamination that will minimize the risk of coating failure. The information in this document is based on an evaluation of published data from technical literature, as well as unpublished data from coating-system manufacturers and users.

© ISO 2001 – All rights reserved