



International
Standard

ISO 21207

**Corrosion tests in artificial
atmospheres — Accelerated
corrosion tests involving alternate
exposure to corrosion-promoting
gases, neutral salt-spray and drying**

*Essais de corrosion en atmosphères artificielles — Essais de
corrosion accélérée par expositions alternées à des gaz favorisant
la corrosion ou au brouillard salin neutre et à un séchage*

**Third edition
2025-04**

ISO 21207:2025

<https://standards.iteh.ai/catalog/standards/iso/d8918e6a-3f92-4440-8b2a-a4b2ae960cbe/iso-21207-2025>

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

ISO 21207:2025

<https://standards.iteh.ai/catalog/standards/iso/d8918e6a-3f92-4440-8b2a-a4b2ae960cbe/iso-21207-2025>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2025
All rights reserved.

ISO publications, in their entirety or in fragments, are owned by ISO. They are licensed, not sold, and are subject to the terms and conditions set forth in the ISO End Customer License Agreement, the License Agreement of the relevant ISO member body, or those of authorized third-party distributors.

Unless otherwise specified or required for its implementation, no part of this ISO publication may be reproduced, distributed, modified, or used in any form or by any means, electronic or mechanical, including photocopying, scanning, recording, or posting on any intranet, internet, or other digital platforms, without the prior written permission of ISO, the relevant ISO member body or an authorized third-party distributor.

This publication shall not be disclosed to third parties, and its use is strictly limited to the license type and purpose specified in the applicable license grant. Unauthorized reproduction, distribution, or use beyond the granted license is prohibited and may result in legal action.

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

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	vii
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Apparatus and reagents	1
4.1 Exposure of test objects to mixtures of NO ₂ and SO ₂	2
4.2 Salt spray testing in accordance with ISO 9227	2
4.3 Drying in standard atmosphere	2
5 Validation of the corrosivity of the tests	3
5.1 Reference test panels	3
5.2 Arrangement of the reference panels during testing	3
5.3 Determination of mass loss after testing	3
5.4 Specifying the acceptance criteria	4
6 Test objects	4
7 Procedure	5
7.1 Test method A	5
7.1.1 Test cycle	5
7.1.2 Salt spray testing followed by drying (step a)	5
7.1.3 Exposure to corrosive gases followed by drying (step b)	5
7.1.4 Test duration	6
7.2 Test method B	6
7.2.1 Test cycle	6
7.2.2 Salt spray testing followed by drying (step a or step c)	6
7.2.3 Exposure to corrosive gases (step b or step d)	6
7.2.4 Test duration	7
8 Evaluation of results	7
9 Test report	7
Annex A (informative) Recommended test periods	9
Annex B (informative) Results from interlaboratory comparison	10
Bibliography	11

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 CEN and 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 document 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).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

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 156, *Corrosion of metals and alloys*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 262, *Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 21207:2015), which has been technically revised.

The main changes are as follows:

- [Clause 3](#) “Terms and definitions” added and numbering of the following clauses adjusted.
- Bibliography updated.
- Table A.2 has been withdrawn.
- [Annex B](#) has been added, which includes an interlaboratory comparison comprising three laboratories.
- The dispersion limits of Cu mass loss have been increased to approximately 30 % in [Table 1](#).

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.

Licensing and use terms

The ISO publications, as well as any updates and/or corrections, and any intellectual property or other rights pertaining thereto, are owned by ISO. ISO publications are licensed, not sold. Nothing in this document shall operate to assign or transfer any intellectual property rights from ISO to the user. The ISO publications are protected by copyright law, database law, trademark law, unfair competition law, trade secrecy law, or any other applicable law, as the case may be. Users acknowledge and agree to respect ISO's intellectual property rights in the ISO publications.

The use of ISO publications is subject to the terms and conditions of the applicable licensing agreement.