



**ISO 7692**

**Ferrotitanium — Determination  
of titanium content —  
Titrimetric method**

*Ferro-titane — Dosage du titane — Méthode titrimétrique*

**Second edition  
2025-01**



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2025

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  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
Website: [www.iso.org](http://www.iso.org)

Published in Switzerland

This is a preview of ISO 7692:2025. [Click here to purchase the full version from the ANSI store.](#)

<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>1</b>
<b>5 Reagents</b> .....	<b>1</b>
<b>6 Apparatus</b> .....	<b>3</b>
<b>7 Sample</b> .....	<b>5</b>
<b>8 Procedure</b> .....	<b>5</b>
8.1 Test portion.....	5
8.2 Blank test and check test.....	5
8.3 Determination.....	6
8.3.1 Decomposition of the test portion.....	6
8.3.2 Absence of interfering elements.....	6
8.3.3 Separation of interfering elements.....	6
8.3.4 Reduction.....	6
8.3.5 Titration.....	7
<b>9 Expression of results</b> .....	<b>7</b>
<b>10 Precision</b> .....	<b>7</b>
10.1 Expression of precision.....	7
10.2 Calculation of final results.....	8
<b>11 Test report</b> .....	<b>8</b>
<b>Annex A (informative) Original data from the verification test</b> .....	<b>9</b>
<b>Annex B (informative) Graphical representation of the precision data</b> .....	<b>10</b>
<b>Annex C (informative) Flow chart for the acceptance procedure of test results</b> .....	<b>11</b>
<b>Bibliography</b> .....	<b>12</b>

This is a preview of ISO 7692:2025. [Click here to purchase the full version from the ANSI store.](#)

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 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](http://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](http://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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 132, *Ferroalloys*.

This second edition cancels and replaces the first edition (ISO 7692:1983), which has been technically revised.

The main changes are as follows:

- in [5.5](#) (previously in 4.6), hydrofluoric acid has been replaced with fluoboric acid;
- in [5.13](#) (previously in 4.17), the concentration of titanium standard solution has been changed;
- in [5.13.1](#) (previously in 4.17.1), the amount of titanium(IV) dioxide has been reduced and the decomposition of titanium(IV) dioxide has been changed;
- in [5.13.2](#) (previously in 4.17.2), potassium hexafluorotitanate has been replaced with a titanium sponge and the preparation has been changed;
- in [Clause 6](#) (previously in Clause 5), polytetrafluoroethylene (PTFE) beakers have been replaced with a conical flask;
- in [Clause 7](#) (previously in Clause 6), the mesh size of the sieve has been changed;
- the paragraph of the definition of test portion has been changed in [8.1](#) and the amount of test portion in [8.1](#) (previously 7.1) has been reduced from 1,0 g to 0,50 g;
- in 8.2.1, (previously in 7.4.1), the method using titanium sponge has been removed;
- in [8.3.1](#) (previously 7.5.1), the amount of acids has been reduced;
- in [8.3.4](#) (previously 7.5.3.2), the amount of the aluminium has been reduced from 4,0 g to 3,0 g ± 0,2 g;
- in [Clause 9](#) (previously in Clause 8), the expression of results has been changed;
- in [Clause 10](#), the precision has been added;

This is a preview of ISO 7692:2025. [Click here to purchase the full version from the ANSI store.](#)

- [Annex A](#) has been added;
- [Annex B](#) has been added;
- [Annex C](#) has been added.

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](http://www.iso.org/members.html).