

First edition
1993-09-15

AMENDMENT 1
2013-03-15

**Nickel alloys — Determination
of titanium content —
Diantipyrylmethane molecular
absorption spectrometric method**

**AMENDMENT 1: Alternative procedure
for the preparation of the titanium
standard solution**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

*Alliages de nickel — Dosage du titane — Méthode par spectrométrie
d'absorption moléculaire au diantipyrylméthane*

<https://standards.iteh.ai/catalog/standards/sist/2f8b01e-a5b3-42c1-99e3-e238bc6d13c1/iso-11433-1993-amd-1-2013>
**AMENDMENT 1: Procédure alternative pour la préparation de la
solution étalon de titane**



Reference number
ISO 11433:1993/Amd.1:2013(E)

© ISO 2013

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 11433:1993/Amd 1:2013](https://standards.iteh.ai/catalog/standards/sist/a2f8b01e-a5b3-42c1-90e3-e238bc6d43c1/iso-11433-1993-amd-1-2013)
<https://standards.iteh.ai/catalog/standards/sist/a2f8b01e-a5b3-42c1-90e3-e238bc6d43c1/iso-11433-1993-amd-1-2013>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, 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
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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 2.

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.

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.

Amendment 1 to ISO 11433:1993 was prepared by Technical Committee ISO/TC 155, *Nickel and nickel alloys*.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 11433:1993/Amd 1:2013
https://standards.iteh.ai/catalog/standards/sist/a2f8b01e-a5b3-42c1-90e3-
e238bc6d43c1/iso-11433-1993-amd-1-2013](https://standards.iteh.ai/catalog/standards/sist/a2f8b01e-a5b3-42c1-90e3-e238bc6d43c1/iso-11433-1993-amd-1-2013)

Introduction

In the 2008 Systematic review of ISO 11433:1993, *Nickel alloys — Determination of titanium content — Diantipyrylmethane molecular absorption spectrometric method*, ISO/TC 155 recommended the publication of an amendment, because the reagent potassium titanyle oxalate dihydrate is difficult to obtain with a high purity.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 11433:1993/Amd 1:2013](https://standards.iteh.ai/catalog/standards/sist/a2f8b01e-a5b3-42c1-90e3-e238bc6d43c1/iso-11433-1993-amd-1-2013)

<https://standards.iteh.ai/catalog/standards/sist/a2f8b01e-a5b3-42c1-90e3-e238bc6d43c1/iso-11433-1993-amd-1-2013>

Nickel alloys — Determination of titanium content — Diantipyrylmethane molecular absorption spectrometric method

AMENDMENT 1: Alternative procedure for the preparation of the titanium standard solution

Page 2, Clause 4, Reagents

Add the following new subclause

4.13 Alternative procedure for the preparation of the titanium standard solution

Weigh $0,1 \text{ g} \pm 0,001 \text{ g}$ of pure titanium (99,99 % purity) and transfer into a 250 ml beaker.

Add 50 ml of diluted (1 + 3) sulfuric acid and dissolve with moderate heating.

Oxidize the titanium by adding nitric acid dropwise until the blue colour is just discharged. Avoid an excess of nitric acid, which will cause the titanium to precipitate.

Cool to room temperature, transfer into a 200 ml volumetric flask and dilute to volume with diluted (1 + 9) sulfuric acid.

1 ml of this standard solution contains 0,5 mg of titanium.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 11433:1993/Amd 1:2013](https://standards.iteh.ai/catalog/standards/sist/a2f8b01e-a5b3-42c1-90e3-e238bc6d43c1/iso-11433-1993-amd-1-2013)
<https://standards.iteh.ai/catalog/standards/sist/a2f8b01e-a5b3-42c1-90e3-e238bc6d43c1/iso-11433-1993-amd-1-2013>