

BS ISO 4939:2016



BSI Standards Publication

Steel — Determination of nickel — Dimethylglyoxime spectrophotometric method

bsi.

...making excellence a habit.
AVA Documents™
Document Sharing Hub

National foreword

This British Standard is the UK implementation of ISO 4939:2016. It supersedes BS 6200-3.20.3:1985 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ISE/102, Methods of Chemical Analysis for Iron and Steel.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2016.
Published by BSI Standards Limited 2016

ISBN 978 0 580 81536 2

ICS 77.080.01

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 29 February 2016.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

INTERNATIONAL STANDARD

BS ISO 4939:2016

ISO
4939

Second edition
2016-02-01

Steel — Determination of nickel — Dimethylglyoxime spectrophotometric method

*Aciers — Détermination du nickel — Méthode spectrophotométrique
à la diméthylglyoxime*



Reference number
ISO 4939:2016(E)
Documents
Document Sharing Hub
© ISO 2016



COPYRIGHT PROTECTED DOCUMENT

© ISO 2016, Published in Switzerland

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
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Principle	1
4 Reagents	1
5 Apparatus	2
6 Sampling	2
7 Procedure	2
7.1 Test portion	2
7.2 Blank test	2
7.3 Determination	2
7.3.1 Preparation of the test solution	2
7.3.2 Colour development	3
7.3.3 Preparation of the compensating solution	3
7.3.4 Spectrophotometric measurement	3
7.4 Establishment of the calibration curve	3
7.4.1 Preparation of the calibration solutions	3
7.4.2 Spectrophotometric measurement	4
7.4.3 Calibration curves	4
8 Expression of results	4
9 Precision	5
9.1 General	5
9.2 Repeatability	5
9.3 Reproducibility	5
10 Test report	5
Annex A (informative) Additional information on the international interlaboratory test	7
Annex B (informative) Graphical representation of precision data	8
Bibliography	9

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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#).

The committee responsible for this document is ISO/TC 17, *Steel*, Subcommittee SC 1, *Methods of determination of chemical compound*.

This second edition cancels and replaces the first edition (ISO 4939:1984), which has been technically revised. In particular, the specification of plotting of the calibration graphs shown in [7.4.3](#) has been corrected.