

INTERNATIONAL
STANDARD

ISO
2409

Fourth edition
2013-02-15

Paints and varnishes — Cross-cut test

Peintures et vernis — Essai de quadrillage



Reference number
ISO 2409:2013(E)

This is a preview. [Click here to purchase the full publication.](#)

© ISO 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

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Apparatus	2
3.1 General.....	2
3.2 Cutting tool.....	2
3.3 Guiding and spacing edges	5
3.4 Viewing lens	5
4 Sampling	7
5 Test panels	7
5.1 Substrate	7
5.2 Preparation and coating.....	7
5.3 Drying.....	7
5.4 Thickness of coating.....	7
6 Procedure	7
6.1 General.....	7
6.2 Cutting the coating using the manual procedure.....	8
6.3 Cutting the coating using a motor-driven tool.....	9
7 Evaluation and expression of results	9
8 Designation of the test result	9
9 Precision	10
9.1 Repeatability limit, <i>r</i>	10
9.2 Reproducibility limit, <i>R</i>	10
10 Test report	10
Annex A (informative) Examples of suitable procedures for removing loose paint	12
Bibliography	14

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.

ISO 2409 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

This fourth edition cancels and replaces the third edition (ISO 2409:2007), which has been technically revised. The main changes are as follows:

- a) the description of suitable methods for removal of loose paint have been transferred to an informative annex as examples and, for the method using adhesive tape, the adhesive strength of the tape is no longer specified;
- b) the single-blade cutting tool originally used in the first edition (1972) of this International Standard has been re-introduced;
- c) a cutting tool used with automatic cross-cut apparatus has also been specified;
- d) the pictorial standard for classification 2 has been replaced by one originally used in the first edition (1972) and the second edition (1992) of this International Standard;
- e) plastics have been added as an example of a hard substrate in [6.1.4](#);
- f) a designation code has been introduced to indicate the test result;
- g) the supplementary test conditions previously in [Clause 7](#) have been integrated in the test report;
- h) a note has been added to Subclause [3.2.1](#) that the apparatus (manual or motor-driven) and the type of cutting tool used have an influence on the test result.