Soft soldering fluxes - Test methods - Part 5: Copper mirror test (ISO 9455-5:2014)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 9455-5:2014 sisaldab Euroopa standardi EN ISO 9455-5:2014 inglisekeelset teksti.	This Estonian standard EVS-EN ISO 9455-5:2014 consists of the English text of the European standard EN ISO 9455-5:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 02.07.2014.	Date of Availability of the European standard is 02.07.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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English Version

Soft soldering fluxes - Test methods - Part 5: Copper mirror test (ISO 9455-5:2014)

Flux de brasage tendre - Méthodes d'essai - Partie 5: Essai au miroir de cuivre (ISO 9455-5:2014)

Flussmittel zum Weichlöten - Prüfverfahren - Teil 5: Kupferspiegeltest (ISO 9455-5:2014)

This European Standard was approved by CEN on 28 May 2014.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN ISO 9455-5:2014) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 “Welding and allied processes” the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2015, and conflicting national standards shall be withdrawn at the latest by January 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 29455-5:1993.

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Endorsement notice

The text of ISO 9455-5:2014 has been approved by CEN as EN ISO 9455-5:2014 without any modification.

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1 Scope

This part of ISO 9455 specifies a qualitative method for assessing the aggressiveness of a flux towards copper. The test is applicable to all fluxes of type 1 as defined in ISO 9454-1.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 9454-1, *Soft soldering fluxes — Classification and requirements — Part 1: Classification, labelling and packaging*

ISO 9455-1, *Soft soldering fluxes — Test methods — Part 1: Determination of non-volatile matter, gravimetric method*

ISO 9455-2, *Soft soldering fluxes — Test methods — Part 2: Determination of non-volatile matter, ebulliometric method*

3 Principle

For flux samples in the form of a solid or paste, and for flux-cored solder, a flux test solution containing 25 % (*m*/*m*) of solids is prepared. For liquid flux samples, the liquid is used full strength as the flux test solution. The flux test solution is then evaluated in terms of its attack on a copper film previously vacuum deposited onto a glass plate (copper mirror). A rosin reference solution, which should not cause removal of the copper film, is used as a control. The object of the test is to determine the flux reactivity due to the presence of free halide activators.

NOTE The presence of amines in the flux can cause misleading results in that the flux appears to pass the test, when in fact it has a highly reactive composition.

4 Reagents

Use only reagents of recognized analytical grade and only distilled, or deionized, water.

4.1 Acetone.

4.2 Propan-2-ol.

4.3 Degreasing agent, such as a suitable neutral organic solvent such as acetone or petroleum ether.

4.4 Rosin reference solution, 25 % (*m*/*m*), prepared by dissolving 25 g of W-W grade colophony in 75 g of propan-2-ol (see 4.2).

4.5 Ethylenediaminetetraacetic acid (EDTA), 0,1 % (*m*/*m*) solution.