INTERNATIONAL STANDARD

ISO 9455-14

Second edition 2017-08

Soft soldering fluxes — Test methods —

Part 14:

Assessment of tackiness of flux residues

Flux de brasage tendre — Méthodes d'essai — Partie 14: Détermination du pouvoir collant des résidus de flux





COPYRIGHT PROTECTED DOCUMENT

 $\, @ \,$ ISO 2017, 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
Fore	eword	iv
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	1
5	Reagents and materials	1
6	Apparatus	2
7	Test pieces	2
8	Procedure	3
9	Examination of the test piece	4
10	Expression of results	4
11	Test report	4

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 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 12, *Soldering materials*.

This second edition cancels and replaces the first edition (ISO 9455-14:1991), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the test report has been updated;
- this document has been editorially revised.

A list of all parts in the ISO 9455 series can be found on the ISO website.

Requests for official interpretations of any aspect of this document should be directed to the Secretariat of ISO/TC 44/SC 12 via your national standards body. A complete listing of these bodies can be found at www.iso.org.

Soft soldering fluxes — Test methods —

Part 14:

Assessment of tackiness of flux residues

1 Scope

This document specifies a qualitative method for the assessment of the tackiness of the residues of a soft soldering flux after a soldering process. The method is applicable to all fluxes, solder pastes and flux cored solder wires. The method is particularly appropriate for applications where flux residues are left *in situ* on electrical and electronic equipment.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 197-1, Copper and copper alloys — Terms and definitions — Part 1: Materials

ISO 9453, Soft solder alloys — Chemical compositions and forms

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 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

4 Principle

The flux is melted on a copper sheet test piece in contact with a standard mass of solder. In the case of flux cored solders and solder pastes, a standard mass of the material is melted on the copper test piece. After the test piece has cooled to room temperature, the flux residues are tested for tackiness using chalk powder.

5 Reagents and materials

In the test, only reagents of recognized analytical quality and only distilled, or deionized, water shall be used.