INTERNATIONAL STANDARD

**ISO 9455-13**

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# Soft soldering fluxes — Test methods —

## Part 13: Determination of flux spattering

*Flux de brasage tendre — Méthodes d'essai —*

*Partie 13: Détermination des projections de flux*

Reference number
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# Foreword

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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).

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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 9455-13:1996), which has been technically revised.

The main changes to the previous version are:

— solder designations have been updated according to ISO 9453;

— the test report has been updated;

— editorial revisions have been made.

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 13: Determination of flux spattering

## 1 Scope

This document specifies a method for estimating the tendency of a flux to spatter in use. It is a qualitative (comparative) method and is only applicable to liquid fluxes, as defined in ISO 9454-1.

The method is not applicable to flux cored solder wire or to solder pastes.

## 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 3574, *Cold-reduced carbon steel sheet of commercial and drawing qualities*

ISO 9453, *Soft solder alloys — Chemical compositions and forms*

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

## 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:

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

## 4 Principle

A measured amount of the liquid flux under test is placed on a specimen plate of sheet steel. The plate is heated on a solder bath and the plate examined visually for evidence of spattering of the flux.

## 5 Apparatus

Usual laboratory apparatus and, in particular, the following.

**5.1 Solder bath**, of rectangular cross-section, approximately 150 mm × 100 mm, containing at least 4 kg of tin-base solder according to ISO 9453. The depth of the solder shall be such that the liquid surface of the solder is not greater than 5 mm from the bath rim. The bath shall be capable of being maintained at a temperature of (400 ± 10) °C.