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# (JWES) Test methods for soldering fluxes

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### Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Welding Engineering Society (JWES) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS Z 3197** : 2012), which has been technically revised.

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## Test methods for soldering fluxes

#### Introduction

This Japanese Industrial Standard has been prepared based on ISO 9454-1 : 2016, Edition 2, ISO 9455-1 : 1990, Edition 1, ISO 9455-3 : 2019, Edition 2, ISO 9455-5 : 2014, Edition 2, ISO 9455-6 : 1995, Edition 1, ISO 9455-10 : 2012, Edition 2, ISO 9455-13 : 2017, Edition 2, ISO 9455-14 : 2017, Edition 2, ISO 9455-15 : 2017, Edition 2, ISO 9455-16 : 2019, Edition 3, ISO 9455-17 : 2002, Edition 1, and ISO 12224-2 : 1997, Edition 1, and IEC 61189-5-2 : 2015, Edition 1, IEC 61189-5-3 : 2015, Edition 1 and IEC 61189-5-4 : 2015, Edition 1 with some modifications of the technical contents.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standards. A list of modifications with the explanations is given in Annex JA.

#### 1 Scope

This Standard specifies the test methods for <u>soldering fluxes</u> (hereafter referred to as fluxes) mainly intended for connection of wiring and parts in electric and electronic apparatuses and communication devices.

**WARNING** Persons carrying out tests based on this Standard should be familiar with normal laboratory practice.

This Standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety and health practices.

NOTE The International Standards corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 9454-1 : 2016 Soft soldering fluxes — Classification and requirements — Part 1 : Classification, labelling and packaging

ISO 9455-1:1990 Soft soldering fluxes — Test methods — Part 1: Determination of non-volatile matter, gravimetric method

ISO 9455-3:2019 Soft soldering fluxes — Test methods — Part 3: Determination of acid value, potentiometric and visual titration methods

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

ISO 9455-6: 1995 Soft soldering fluxes — Test methods — Part 6: Determination and detection of halide (excluding fluoride) content

ISO 9455-10 : 2012 Soft soldering fluxes — Test methods — Part 10 : Flux efficacy test, solder spread method

ISO 9455-13 : 2017 Soft soldering fluxes — Test methods — Part 13 : Determination of flux spattering