JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS Z 3197 : 2021

(JWES)

Test methods for soldering fluxes

currently in preview, click buy full versi

ICS 25.160.50 ; 77.140.10
Reference number : JIS Z 3197 : 2021 (E)

PROTECTED BY COPYRIGHT

Date of Establishment: 1972-11-01

Date of Revision: 2021-03-22

Date of Public Notice in Official Gazette: 2021-03-22

Investigated by: Japanese Industrial Standards Committee

Standards Board for ISO area

Technical Committee on Metal and Inorganic Materials

JIS Z 3197 : 2021, First English edition published in 2022-11

Translated and published by: Japanese Standards Association
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

© JSA 2022
All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan HN

PROTECTED BY COPYRIGHT

currently in preview, click buy full version

Contents

currently in preview, click buy full versi

PROTECTED BY COPYRIGHT

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.

This **JIS** document is protected by the Copyright Act.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any such patent rights, published patent application or utility model rights.

currently in preview, click buy full version

PROTECTED BY COPYRIGHT

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 soldering fluxes (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*

PROTECTED BY COPYRIGHT

currently in preview, click buy full version

ISO 9455-14 : 2017 *Soft soldering fluxes — Test methods — Part 14 : Assessment of tackiness of flux residues*

ISO 9455-15 : 2017 *Soft soldering fluxes — Test methods — Part 15 : Copper corrosion test*

ISO 9455-16 : 2019 *Soft soldering fluxes — Test methods — Part 16 : Flux efficacy test, wetting balance method*

ISO 9455-17 : 2002 *Soft soldering fluxes — Test methods — Part 17 : Surface insulation resistance comb test and electrochemical migration test of flux residues*

ISO 12224-2 : 1997 *Flux cored solder wire — Specification and test methods — Part 2 : Determination of flux content*

IEC 61189-5-2 : 2015 *Test methods for electrical materials, printed boards and other interconnection structures and assemblies — Part 5-2 : General test methods for materials and assemblies — Soldering flux for printed board assemblies*

IEC 61189-5-3 : 2015 *Test methods for electrical materials, printed boards and other interconnection structures and assemblies — Part 5-3 : General test methods for materials and assemblies — Soldering paste for printed board assemblies*

IEC 61189-5-4 : 2015 *Test methods for electrical materials, printed boards and other interconnection structures and assemblies — Part 5-4 : General test methods for materials and assemblies — Solder alloys and fluxed and non-fluxed solid wire for printed board assemblies* (overall evaluation : MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 7502 *Micrometers*

JIS B 7525 *Hydrometers — Part 3 : Specific gravity meters*

JIS C 6480 *General rules of copper-clad laminates for printed wiring boards*

JIS H 3100 *Copper and copper alloy sheets, plates and strips*

JIS H 3260 *Copper and copper alloy wires*

JIS K 2265-1 *Determination of flash point — Part 1 : Tag closed cup method*

JIS K 2265-2 *Determination of flash point — Part 2 : Rapid equilibrium closed cup method*

currently in preview, click buy full version

PROTECTED BY COPYRIGHT