

# **SLOVENSKI STANDARD**

## **SIST EN ISO 9454-1:2016**

**01-maj-2016**

**Nadomešča:**  
**SIST EN 29454-1:1998**

---

**Talila za mehko spajkanje - Klasifikacija in zahteve - 1. del: Klasifikacija, označevanje in pakiranje (ISO 9454-1:2016)**

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

Flussmittel zum Weichlöten - Einteilung und Anforderungen - Teil 1: Einteilung, Kennzeichnung und Verpackung (ISO 9454-1:2016)

Flux de brasage tendre - Classification et caractéristiques - Partie 1: Classification, marquage et emballage (ISO 9454-1:2016)

**Ta slovenski standard je istoveten z: EN ISO 9454-1:2016**

---

**ICS:**

25.160.50      Trdo in mehko lotanje      Brazing and soldering

**SIST EN ISO 9454-1:2016**

**en,fr,de**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 9454-1:2016](https://standards.iteh.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ac/sist-en-iso-9454-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ac/sist-en-iso-9454-1-2016>

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN ISO 9454-1**

March 2016

ICS 25.160.50

Supersedes EN 29454-1:1993

English Version

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

Flux de brasage tendre - Classification et exigences -  
Partie 1: Classification, marquage et emballage (ISO  
9454-1:2016)

Flussmittel zum Weichlöten - Einteilung und  
Anforderungen - Teil 1: Einteilung, Kennzeichnung und  
Verpackung (ISO 9454-1:2016)

This European Standard was approved by CEN on 2 January 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

**iTeh STANDARD PREVIEW**  
(standards.itih.eu)

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Contents

Page

European foreword.....	3
------------------------	---

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 9454-1:2016](https://standards.iteh.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ae/sist-en-iso-9454-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ae/sist-en-iso-9454-1-2016>

## European foreword

This document (EN ISO 9454-1:2016) 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 September 2016, and conflicting national standards shall be withdrawn at the latest by September 2016.

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 29454-1:1993.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

**Full STANDARD PREVIEW**  
(standard.itch.ai)

Endorsement notice

The text of ISO 9454-1:2016 has been approved by CEN as EN ISO 9454-1:2016 without any modification.

<https://standards.itch.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ac/sist-en-iso-9454-1-2016>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 9454-1:2016](https://standards.iteh.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ac/sist-en-iso-9454-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ac/sist-en-iso-9454-1-2016>

# INTERNATIONAL STANDARD

**ISO  
9454-1**

Second edition  
2016-02-01

---

---

## **Soft soldering fluxes — Classification and requirements —**

### **Part 1: Classification, labelling and packaging**

*Flux de brasage tendre — Classification et exigences —*

*Partie 1: Classification, marquage et emballage*

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

SIST EN ISO 9454-1:2016

<https://standards.iteh.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ae/sist-en-iso-9454-1-2016>



Reference number  
ISO 9454-1:2016(E)

© ISO 2016

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 9454-1:2016

<https://standards.iteh.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ae/sist-en-iso-9454-1-2016>



### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2016, 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

<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Classification of fluxes</b> .....	<b>1</b>
<b>3 Labelling and packaging</b> .....	<b>1</b>
<b>Annex A (informative) Grades of fluxes</b> .....	<b>3</b>
<b>Annex B (informative) Testing of fluxes</b> .....	<b>6</b>
<b>Bibliography</b> .....	<b>9</b>

## iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 9454-1:2016

<https://standards.iteh.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ae/sist-en-iso-9454-1-2016>

## ISO 9454-1:2016(E)

## 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](http://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](http://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 meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#).

The committee responsible for this document is ISO/TC 44, *Welding and allied processes*, Subcommittee SC 12, *Soldering materials*.

This second edition cancels and replaces the first edition (ISO 9454-1:1990), which has been technically revised.

ISO 9454 consists of the following parts, under the general title *Soft soldering fluxes — Classification and requirements*:

- *Part 1: Classification, labelling and packaging*
- *Part 2: Performance requirements*

## Introduction

Fluxes assist molten solder to wet metal surfaces to be joined by removing oxides and related contaminations from the solder and surfaces of the parts during soldering. Fluxes also protect surfaces from oxidation and assist wetting of the base metals by molten solder.

Care is necessary when selecting a flux for a particular application, in order to ensure an adequate service life of the assembly. Factors such as the ease of residue removal, corrosiveness, possible health and safety hazards and the efficacy of the flux should all be considered.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN ISO 9454-1:2016](https://standards.iteh.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ae/sist-en-iso-9454-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/f6bfe6a7-d3ed-4e2b-bfb4-6b4f4dcf18ae/sist-en-iso-9454-1-2016>