BS EN ISO 18496:2021

BSI Standards Publication

Brazing — Fluxes for brazing — Classification and technical delivery conditions

National foreword

This British Standard is the UK implementation of EN ISO 18496:2021. It is identical to ISO 18496:2020. It supersedes BS EN 1045:1997 and BS ISO 18496:2020, which are withdrawn.

The UK participation in its preparation was entrusted to Technical Committee WEE/19, Brazing and braze welding.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Date	Text affected
30 November 2021	This corrigendum renumbers BS ISO 18496:2020 as BS EN ISO 18496:2021. The supersession details in the national foreword have also been updated.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

Brazing - Fluxes for brazing - Classification and technical delivery conditions (ISO 18496:2020)

Brasage fort - Flux pour le brasage fort - Classification et conditions techniques de livraison (ISO 18496:2020)

Hartlöten - Flussmittel zum Hartlöten - Einteilung und technische Lieferbedingungen (ISO 18496:2020)

This European Standard was approved by CEN on 3 October 2021.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

The text of ISO 18496:2020 has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 18496:2021 by 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of an identical text or by endorsement, at the latest by April 2022, and conflicting national standards shall be withdrawn at the latest by April 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1045:1997.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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Endorsement notice

The text of ISO 18496:2020 has been approved by CEN as EN ISO 18496:2021 without any modification.

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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).

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For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 13, *Brazing materials and processes*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Official interpretations of ISO/TC 44 documents, where they exist, are available from this page: https://committee.iso.org/sites/tc44/home/interpretation.html.

INTERNATIONAL STANDARD ISO 18496:2020

Brazing — Fluxes for brazing — Classification and technical delivery conditions

1 Scope

This document specifies the classification of fluxes used for brazing metals and characterizes these fluxes on the basis of their properties and use, and gives technical delivery conditions and health and safety precautions.

This document covers two classes of flux, FH and FL. Class FH is used for the brazing of heavy metals (steels, stainless steels, copper and its alloys, nickel and its alloys, precious metals, molybdenum and tungsten). Class FL is used for the brazing of aluminium and its alloys.

2 Normative references

There are no normative references in this document.

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 https://www.iso.org/obp

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

4 Classification

4.1 General

The form of the fluxes shall be classified according to Table 1 A, B or C. The effective temperature range can be determined according to Annex A.

4.2 Fluxes for brazing heavy metals (Class FH)

4.2.1 General

Class FH covers nine types of flux. The code for each type consists of the class letters FH followed by two digits.

4.2.2 Type FH10

Fluxes with an effective temperature range from about 550 °C up to about 800 °C. They contain boron compounds, simple and complex fluorides and are used at brazing temperatures above 600 °C. These are general purpose fluxes. The residues are usually corrosive and have to be removed by washing or pickling.

4.2.3 Type FH11

Fluxes with an effective temperature range from about 550 °C up to about 800 °C. They contain boron compounds, simple and complex fluorides and chlorides and are used at brazing temperatures above