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



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 18496:2021 sisaldab Euroopa standardi EN ISO 18496:2021 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 18496:2021 consists of the English text of the European standard EN ISO 18496:2021.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.10.2021.

Date of Availability of the European standard is 13.10.2021.

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ICS 25.160.50

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EUROPEAN STANDARD

EN ISO 18496

NORME EUROPÉENNE EUROPÄISCHE NORM

October 2021

ICS 25.160.50

Supersedes EN 1045:1997

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)

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EUROPEAN COMMITTEE FOR STANDARDIZATION 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of an identical text or by endorsement, at the latest by April 2022, and conflicting national standards shall be withdrawn at the latest by April 2022.

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This document supersedes EN 1045:1997.

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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.

Contents			Page
For	eword		iv
1	Scor	pe	1
2	Nor	rmative references	1
3		ms and definitions	
4	4.1	ssification General	
	4.1		
	1.2	4.2.1 General	
		4.2.2 Type FH10	
		4.2.3 Type FH11	1
		4.2.4 Type FH12	
		4.2.5 Type FH20	
		4.2.6 Type FH21	
		4.2.7 Type FH22	
		4.2.9 Type FH30	
		4.2.10 Type FH40	
	4.3		
		4.3.1 General	
		4.3.2 Type FL10	
		4.3.3 Type FL20	
		4.3.4 Type FL30	
5	Desi	signation	5
6	Technical delivery conditions		
	6.1	Forms of delivery	
	6.2	Packaging and marking	5
7	Hea	alth and safety precautions	5
Ann	ex A (ir	nformative) Determination of the effective temperature range	6
		informative) Technical properties and form of delivery	

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

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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 <u>Table 1</u> A, B or C. The effective temperature range can be determined according to <u>Annex A</u>.

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 $550\,^{\circ}\text{C}$ up to about $800\,^{\circ}\text{C}$. They contain boron compounds, simple and complex fluorides and are used at brazing temperatures above $600\,^{\circ}\text{C}$. 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 $550\,^{\circ}\text{C}$ up to about $800\,^{\circ}\text{C}$. They contain boron compounds, simple and complex fluorides and chlorides and are used at brazing temperatures above