



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 15829-2021

Soft soldering flux - Classification and requirements

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foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules of Standardization Documents"

drafted:

This document replaces GB/T 15829-2008 "Classification and Performance Requirements of Soft Flux": Compared with GB/T 15829-2008, except for the structure

In addition to adjustments and editorial changes, the main technical changes are as follows:

--- Changed the validity of the referenced documents, and replaced the various parts of ISO 9455 with the parts of GB/T 38265 that have been revised and adopted international standards:

part (see Chapter 2, Chapter 2 of the:2008 edition);

--- Changed the classification of inorganic flux matrix, and divided "1 salts" into "1 salts in aqueous solution" and "2 salts in organic formulations"

Class" (see Table 1, Table 1 of the:2008 edition);

--- Delete the requirements for the flux form in the flux classification, and increase the requirements for the halide content (see Table 1, see Table 1 of the:2008 edition);

--- Changed the flux coding method (see Chapter 4, Table 2, Table 3, Table 4, Chapter 4, Table 2, Table 3, Table 4 of the:2008 edition);

--- Delete the performance requirements of steel pipe corrosion test (see Table 2 and Table 3, Table 2 and Table 3 of the:2008 edition):

This document uses the redrafted method to modify and adopt ISO 9454-1:2016 "Flux classification and performance requirements - Part 1: Classification, standard

"Signing and Packaging" and ISO 9454-2:2020 "Flux Classification and Performance Requirements Part 2: Performance Requirements":

Compared with ISO 9454-1:2016 and ISO 9454-2:2020, this document has many structural adjustments: Appendix A lists the

A list of clauses and clauses of ISO 9454-1:2016 and ISO 9454-2:2020:

The technical differences between this document and ISO 9454-1:2016 and ISO 9454-2:2020 and the reasons are as follows:

--- Regarding normative reference documents, this document has made adjustments with technical differences to adapt to the technical conditions of our country and the circumstances of the adjustment:

The situation is reflected in Chapter 2 "Normative References", and the specific adjustments are as follows:

* Added references to GB/T 38265:1, GB/T 38265:2, GB/T 38265:5, GB/T 38265:10, GB/T 38265:11,

GB/T 38265:13~GB/T 38265:16 (see Chapter 6);

* Added references to ISO 9455-6, ISO 9455-8, ISO 9455-9, ISO 9455-17 (see Chapter 6):

--- Delete the performance requirements for the corrosion test of steel pipes in Table 2 of ISO 9454-2;

--- Changed the flux coding method in Table 2 and Table 3 of ISO 9454-2:

The following editorial changes have been made to this document:

---Added "Appendix A (Informative) The structural changes of this document compared with ISO 9454-1:2016 and ISO 9454-2:2020

"Condition", which is convenient for comparison with ISO standards in application;

--- Delete the informative appendix B and references in ISO 9454-1;

--- Deleted references in ISO 9454-2:

Please note that some content of this document may be patented: The issuing agency of this document assumes no responsibility for identifying patents:

1 Scope

This document specifies the classification, form, performance requirements, labelling and packaging requirements of solder fluxes:

This document applies to all types of soldering fluxes:

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, dated citations

documents, only the version corresponding to that date applies to this document; for

undated references, the latest edition (including all amendments) applies to this document:

GB/T 38265:1 Test Methods for Soldering Flux Part 1: Determination of Non-volatile Matter Content Gravimetric Method (GB/T 38265:1-2019, ISO 9455-1:1990, MOD)

GB/T 38265:2 Test Methods for Soldering Flux Part 2: Determination of Non-volatile Matter Content Boiling Point Method (GB/T 38265:2-2019, ISO 9455-2:1993, MOD)

GB/T 38265:5 Test Methods for Soldering Flux Part 5: Copper Mirror Test (GB/T 38265:5-2021, ISO 9455-5:2020, MOD)

GB/T 38265:10 Test Methods for Soldering Flux Part 10: Test Method for Wetting Properties and Spreading of Soldering Flux (GB/T 38265:10-2019, ISO 9455-10:2012, MOD)

GB/T 38265:11 Test Methods for Soldering Flux Part 11: Solubility of Flux Residues (GB/T 38265:11-2021, ISO 9455-11:2017, MOD)

GB/T 38265:13 Test Methods for Soldering Flux Part 13: Determination of Flux Sputtering (GB/T 38265:13-2021, ISO 9455-13:2017, MOD)

GB/T 38265:14 Test Methods for Soldering Flux Part 14: Evaluation of the Adhesiveness of Flux Residues (GB/T 38265:14-2021, ISO 9455-14:2017, MOD)

GB/T 38265:15 Test Method for Soldering Flux Part 15: Copper Corrosion Test (GB/T 38265:15-2021, ISO 9455-15:2017, MOD)

GB/T 38265:16 Test method for solder flux Part 16: Wetting performance of solder flux Wetting balance method (GB/T 38265:16-2019, ISO 9455-16:2013, MOD)

ISO 9455-3 Test methods for solder fluxes - Part 3: Determination of acid value by potentiometric and visual titration (Soft

solderingfluxes-Test methods-Part 3:Determinationofacidvalue,potentiometricandvisual

titration methods)

Note: ISO 9455-3:2019 Test Methods for Soft Flux Part 3: Determination of Acid Value
Potentiometric and Visual Titration (Soft soldering flu-

xes-Test methods-Part 3: Determination of acid value, potentiometric and visual titration methods)

ISO 9455-6 Test methods for soldering fluxes - Part 6: Determination of halide (excluding
fluoride) content [Soft soldering

fluxes-Test methods-Part 6: Determination and detection of halide (excluding fluoride) content]

Note: ISO 9455-6:1995 Test methods for soldering fluxes - Part 6: Determination of halide
(excluding fluoride) content [Soft soldering fluxes-

Test methods-Part 6: Determination and detection of halide (excluding fluoride) content]

ISO 9455-8 Test methods for soldering fluxes - Part 8: Determination of zinc content
(Soft soldering fluxes-Test

methods-Part 8: Determination of zinc content)

ISO 9455-9 Test methods for soft soldering fluxes - Part 9: Determination of ammonia
content (Soft soldering fluxes-Test

methods-Part 9: Determination of ammonia content)