



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

GB/T 10046-2018

Silver brazing filler metals

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Foreword

This Standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard replaces GB/T 10046-2008 "Silver brazing filler metals".

Compared with GB/T 10046-2008, the main technical changes are as follows.

- Delete the classification table of brazing filler metals (see Clause 3 of the

2008 edition);

- ADD the method of preparing the model of brazing filler metals (see Clause 3);
- Delete the BAg21CuZnCdSi brazing filler metal in the previous standard;
ADD 11 models of brazing filler metals (see 4.2; 4.1 of the 2008 edition);
- COMBINE "Technical conditions and chemical composition" into "Technical requirements" (see Clause 4);
- DIVIDE "Test methods and inspection rules" into Clause 5 "Test methods" and Clause 6 "Inspection rules" (see Clause 5 and Clause 6; Clause 6 of the 2008 edition);
- Adjust and tighten the dimensions and tolerances of brazing filler metals (see 4.3; 5.2 of the 2008 edition).

This Standard uses the redraft law to modify and adopt ISO 17672.2016 "Brazing - Filler metals" (English edition).

Compared with ISO 17672.2016, this Standard has many adjustments in structure. Annex A lists the comparison table for clause-subclause number of this Standard and ISO 17672.2016.

The technical differences between this Standard and ISO 17672.2016 and their reasons are as follows.

- As for the normative references, this Standard has made adjustments with technical differences, to adapt to the technical conditions of China. The adjustments are mainly reflected in Clause 2 "Normative references". The specific adjustments are as follows.

? Delete the referenced international standards ISO 80000-1.2009 and ISO 3677;

? ADD reference to GB/T 8170 (see 4.2), GB/T 11363 (see 5.2), and GB/T

11364 (see 5.3) standards.

- Delete the composition requirements of other brazing filler metal alloys in

Table 5 and Table 7 to Table 13. Other brazing filler metal alloys are not within the scope of this Standard;

- Delete the model representation and example of brazing filler metal in Clause 6. They are different from the model preparation method and model example of brazing filler metal in China;
- Delete Clause 8 Metal hazards. The hazards of cadmium contained in a small part of the brazing filler metals are common sense; there is no need to list it;
- Delete the normative Annex A about the model coding requirements of brazing filler metal. They are different from the model coding requirements of brazing filler metal in China;
- ADD Clause 3 Model. Refer to Clause 6 of the international standard for the model representation of brazing filler metals and industry habits, to compile China's model of brazing filler metals;
- ADD Clause 5 "Test methods" and Clause 6 "Inspection rules" regarding the test and acceptance requirements of brazing filler metals. The requirements of test methods and inspection rules are an important acceptance basis for product quality;
- ADD the normative Annex B ~ Annex K "analysis methods of elements of brazing filler metals". The analysis method of elements of brazing filler metals is an important basis for inspecting alloy elements in brazing filler metal products.

This Standard has made the following editorial changes.

- CHANGE the standard name to "Silver brazing filler metals";
- ADD an informative Annex L "Model comparison of brazing filler metals", to facilitate the comparison with brazing filler metal products in other relevant standards in application.

This Standard was proposed by and shall be under the jurisdiction of National

Technical Committee 55 on Welding of Standardization Administration of China (SAC/TC 55).

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The previous editions of the standard replaced by this Standard were released as follows.

- GB/T 10046-1988, GB/T 10046-2000, GB/T 10046-2008.

Silver brazing filler metals

1 Scope

This Standard specifies the requirements such as model, technical requirements, test methods, inspection rules, packaging, marking, quality certification of silver brazing filler metals.

2 Normative references

The following documents are indispensable for the application of this document.

For the dated references, only the editions with the dates indicated are applicable to this document. For the undated references, the latest edition (including all the amendments) are applicable to this document.

GB/T 6682 Water for analytical laboratory use - Specification and test methods (GB/T 6682-2008, ISO 3696.1987, MOD)

GB/T 8170 Rules of rounding off for numerical values and expression and