



AEROSPACE MATERIAL SPECIFICATION

AMS4185™**REV. G**

Issued 1951-06
Reaffirmed 2010-05
Revised 2026-03

Superseding AMS4185F

Filler Metal, Aluminum Brazing,
12Si

(Composition similar to UNS A94047)

RATIONALE

AMS4185G results from a Five-Year Review and update of this specification with changes to update wording to prohibit unauthorized exceptions (see 5.1.3 and 8.5), relocate Definitions (see 2.3), and update Applicable Documents (see Section 2), Composition (see 3.1), Tolerances (see 3.5), and Ordering Information (see 8.6).

1. SCOPE

1.1 Form

This specification covers an aluminum alloy in the form of wire, sheet, foil, pig, grains, shot, and chips (see 8.6).

1.2 Application

This material has been used typically for joining aluminum by brazing, particularly by molten flux (dip) brazing procedure, but usage is not limited to such applications.

2. APPLICABLE DOCUMENTS

The issue of the following documents in effect on the date of the purchase order forms a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (U.S. and Canada only) or +1 724-776-4970 (outside U.S. and Canada), www.sae.org.

AS7766 Terms Used in Aerospace Metals Specifications

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Full document details: [SAE AMS4185G](http://www.sae.org/standards/content/AMS4185G/)

For more information on this standard, visit <https://www.sae.org/standards/content/AMS4185G/>

Documents

Standard, visit Sharing Hub

2.2 AWS Publications

Available from American Welding Society, 8669 NW 36 Street, #130, Miami, FL 33166-6672, Tel: 1-800-443-9353 or 305-443-9353, www.aws.org.

AWS A5.01M/A5.01 Welding Consumables - Procurement of Filler Metals and Fluxes

AWS A5.8M/A5.8 Specification for Filler Metals for Brazing and Braze Welding

2.3 Definitions

Terms used in AMS are defined in AS7766.

3. TECHNICAL REQUIREMENTS

3.1 Composition

Product shall comply with the requirements of AWS A5.8M/A5.8 BAISI-4.

3.2 Condition

Filler metal shall be furnished in the following condition:

3.2.1 Round Wire, Flattened and Slit Wire, and Sheet

Annealed.

3.2.2 Pig, Grains, Shot, and Chips

As fabricated.

3.2.3 Foil

As ordered (see 8.6).

3.3 Quality

Filler metal, as received by the purchaser, shall be uniform in quality and condition, sound, and free from foreign materials and from imperfections detrimental to usage of the filler metal.

3.4 Standard Sizes

Filler metal shall be supplied in the following standard sizes shown in Table 1. Other sizes and shapes are as ordered by the purchaser.

3.4.1 Round Wire

Shall conform to Table 1.