

# AEROSPACE MATERIAL SPECIFICATION

**SAE** AMS-QQ-A-200/15

1997-07

REV. B

Issued Reaffirmed Stabilized

2007-04 2013-07

Superseding AMS-QQ-A-200/15A

Aluminum Alloy Bar, Rod, and Shapes, Extruded, 7075-T76
Improved Exfoliation Resistance

A97075

#### **RATIONALE**

AMS-QQ-A-200/15B stabilizes this document because equivalent technical requirements are contained in AMS4317.

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AMS-QQ-A-200/15B has been declared "STABILIZED" by AMS Committee D and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist. AMS Committee D has never performed a technical update of this document. Users of this document should refer any certification issues (e.g. exceptions listed on the certification report) to the cognizant engineering organization for their disposition. CAUTION: In many cases the purchaser is not the cognizant engineering organization (i.e. purchaser may be a sub tier supplier). AMS Committee D recommends that the following technically equivalent (e.g. properties, fit, form, function) specification be used for future procurement. This listing does not constitute authority to substitute this specification for the "STABILIZED" specification.

AMS4317

SAE WEB ADDRESS:

Aluminum Alloy, Extruded Bar, Rod, and Shapes 5.6Zn - 2.5Mg - 1.6Cu - 0.23Cr 7075-T76(51X) Solution Heat Treated and Overaged

## NOTICE

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The complete requirements for procuring aluminum alloy 7075-T76 bar, rod, and shapes extruded described herein shall consist of this document and the latest issue of AMS-QQ-A-200.

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# 1. SCOPE AND CLASSIFICATION:

#### 1.1 Scope:

This specification covers the specific requirements for aluminum alloy 7075-T76 bar, rod, and shapes produced by extrusion (See AMS-QQ-A-200/11 for specific requirements for 7075 extrusions in other tempers).

1.1.1 Tempers: Bar, rod, and shapes are classified in the following tempers as specified (See 6.2): T76, T76510, or T76511. Definitions of tempers are specified in AMS-QQ-A-200.

## 2. APPLICABLE DOCUMENTS:

See AMS-QQ-A-200.

## 3. REQUIREMENTS:

# 3.1 Chemical Composition:

The chemical composition shall conform to the requirements specified in Table I.

TABLE I. CHEMICAL COMPOSITION 1/

	Percent	
Element	Minimum	Maximum
Copper	1.2	2.0
Magnesium	2.1	2.9
Manganese		0.30
Chromium	0.18	0.28
Titanium		0.20
Iron		0.50
Silicon		0.40
Zinc	5.1	6.1
Other Elements, each		0.05
Other Elements, total <u>2</u> /		0.15
Aluminum	Remainder	

<sup>1/</sup> Analysis shall routinely be made only for the elements specifically mentioned in Table I. If, however, the presence of other elements is indicated or suspected in amounts greater than the specified limits, further analysis shall be made to determine that these elements are not present in excess of specified limits.

# 3.2 Mechanical Properties:

Mechanical properties of as-supplied material in the longitudinal (extrusion) direction shall conform to property requirements specified in Table II, except as exempted from elongation requirements by AMS-QQ-A-200.

<sup>2/</sup> The sum of those "Others" metallic elements 0.010 percent or more each, expressed to the second decimal before determining the sum.