

**International Alloy Designations
and
Chemical Composition Limits
for
Wrought Aluminum and
Wrought Aluminum Alloys**



1525 Wilson Boulevard, Arlington, VA 22209
www.aluminum.org

With Support for On-line Access From:

Aluminum Extruders Council
Australian Aluminium Council Ltd.
European Aluminium Association
Japan Aluminium Association
Alro S.A, Romania

Revised: January 2015

Supersedes: February 2009

© Copyright 2015, The Aluminum Association, Inc.
Unauthorized reproduction and sale by photocopy or any other method is illegal.

Use of the Information

The Aluminum Association has used its best efforts in compiling the information contained in this publication. Although the Association believes that its compilation procedures are reliable, it does not warrant, either expressly or impliedly, the accuracy or completeness of this information. The Aluminum Association assumes no responsibility or liability for the use of the information herein.

All Aluminum Association published standards, data, specifications and other material are reviewed at least every five years and revised, reaffirmed or withdrawn. Users are advised to contact The Aluminum Association to ascertain whether the information in this publication has been superseded in the interim between publication and proposed use.

This is a preview. [Click here to purchase the full publication.](#)

CONTENTS

	Page
FOREWORD	i
SIGNATORIES TO THE DECLARATION OF ACCORD	ii-iii
REGISTERED DESIGNATIONS AND CHEMICAL COMPOSITION LIMITS	1-14
Footnotes	15
TABLE OF NOMINAL DENSITIES FOR ACTIVE ALLOYS	16-21
TABLE OF INACTIVE ALLOY DESIGNATIONS	22-23
Table of Chemical Composition Limits for Inactive Original Alloys	24-26
CROSS REFERENCES OF INTERNATIONAL DESIGNATIONS— DECLARATION OF ACCORD (DOA) TO ISO	27
RECOMMENDATION TO THE DECLARATION OF ACCORD	28
Footnotes	29
Appendix A—Use and Assignment of Designations	30
Appendix B—Deactivation of Registered Alloys	30
Appendix C—General Guidelines for Determining Compliance with "Sale of Alloy" and "Commercial Quantity" for Purposes of Registering Wrought Aluminum and Wrought Aluminum Alloys	30
DECLARATION OF ACCORD	31

FOREWORD

Listed herein are designations and chemical composition limits for wrought aluminum and wrought aluminum alloys registered with The Aluminum Association. Numerical designations are assigned in accordance with the *Recommendation—International Designation System for Wrought Aluminum and Wrought Aluminum Alloys*, which is printed on pages 28 through 30. Additions may be made in accordance with the rules outlined in the Declaration of Accord printed on page 31, and alloys will be deleted when no longer in commercial use (see table of inactive alloys printed on pages 22-23).

Since the International Designation System for Wrought Aluminum and Wrought Aluminum Alloys is based on USA's national standard "*American National Standard Alloy and Temper Designation System for Aluminum ANSI H35.1*," the system limits introduction of experimental alloy compositions to USA registrations. An experimental alloy registered by USA under this system is indicated by the prefix "X" and is subject to the following rules:

1. A composition shall not be designated as experimental ("X") for more than five years.
2. During its experimental status, the registering organization may request changes in the composition limit of the alloy, provided that it does not invalidate any assigned designation.
3. The "X" is dropped when the alloy is no longer experimental.
4. An experimental composition that is inactivated shall retain the prefix "X" for the duration of its inactive status. If reactivated, the "X" shall be removed.

Some of the registered alloys may be the subject of patent or patent applications, and their listing herein is not to be construed in any way as the granting of a license under such patent right.

This registration record is not intended to address all regulatory requirements that may be imposed by local, national or international governing bodies. Regulatory requirements, which vary by region and end use, can further restrict the chemical composition within the registered limits. When applicable, inclusion of such requirements in the sales agreement is advised.

A list of the organizations that are signatories to the Declaration of Accord on the Recommendation is printed on pages ii-iii.

SIGNATORIES TO THE DECLARATION OF ACCORD

The following organizations are signatories to the Declaration of Accord on an International Alloy Designation System for Wrought Aluminum and Wrought Aluminum Alloys which is printed on page 31 of this publication.

The Aluminum Association Inc. 1525 Wilson Boulevard Suite 600 Arlington, VA 22209 <u>USA</u> www.aluminum.org	USA	Associação Brasileira do Alumínio—ABAL Rua Humberto I, n° 220 - 4° .Andar Vila Mariana - CEP: 04018-030 São Paulo-SP <u>BRAZIL</u> www.abal.org.br	BRAZIL
AFA Association Francaise de l'Aluminium 17, rue de l'amiral Hamelin 75783 Paris Cedex 16 <u>FRANCE</u> www.aluminium-info.com	FRANCE	Association for the Dutch Metallurgic Industry (VNMI) P.O. Box 190 NL-2700 AD Zoetermeer <u>NETHERLANDS</u> www.vnmi.nl	NETHERLANDS
All-Russian Institute of Aviation Materials (VIAM) 17 Radio Ulitza 105005 Moscow <u>RUSSIA</u> www.viam.ru	RUSSIA	Assomet - Associazione Nazionale Industrie Metalli non Ferrosi Via dei Missaglia, 97 I-20142 Milano <u>ITALY</u> www.assomet.it	ITALY
Alro S.A. 116 Pitesti Street Slatina, Olt County 230048 <u>ROMANIA</u> www.alro.ro	ROMANIA	Australian Aluminium Council Limited Level 1, Dickson Square P.O. Box 63 Dickson, Canberra ACT 2602 <u>AUSTRALIA</u> www.aluminium.org.au	AUSTRALIA
Aluminium Association of Canada 1010 Sherbrooke Street West, Suite 1600 Montreal, Quebec H3A 2R7 <u>CANADA</u> www.aac.aluminium.qc.ca	CANADA	Austrian Non-Ferrous Metals Federation Wiedner Hauptstraße 63 1045 Vienna <u>AUSTRIA</u> www.nemetall.at	AUSTRIA
Aluminium Center Belgium Z.I. Research Park 310 B-1731 Zellik <u>BELGIUM</u> www.aluminiumcenter.be	BELGIUM	Centro Nacional de Investigaciones Metalurgicas (CENIM) Avenida Gregorio del Amo, 8 Ciudad Universitaria 28040 Madrid <u>SPAIN</u> www.cenim.csic.es	SPAIN
Aluminium Federation Limited National Metalforming Centre 47 Birmingham Road West Bromwich, West Midlands B70 6PY <u>UNITED KINGDOM</u> www.alfed.org.uk	UK	China Nonferrous Metals Techno-Economic Research Institute No. 31 Suzhou Street Haidian District Beijing, 100080 <u>PEOPLES REPUBLIC OF CHINA</u> www.cnsmq.com	CHINA
Aluminium Federation of South Africa P. O. Box 423 Isando, 1600 <u>REPUBLIC OF SOUTH AFRICA</u> www.afsa.org.za	SOUTH AFRICA	European Aluminium Association Avenue de Broqueville, 12 B-1150 Brussels <u>BELGIUM</u> www.aluminium.org	EAA
Aluminium – Verband Schweiz Hallenstrasse 15 Postfach 71 CH-8024 Zurich <u>SWITZERLAND</u> www.alu.ch	SWITZERLAND		