

Designations and Chemical Composition Limits for Aluminum Alloys in the Form of Castings and Ingot



1400 Crystal Drive, Arlington, VA 22202
www.aluminum.org

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CONTENTS

FOREWORD	i
REGISTERED DESIGNATIONS AND CHEMICAL COMPOSITION LIMITS.....	1-10
Footnotes	11-12
INACTIVE ALLOYS.....	13
REGISTERED CHEMICAL COMPOSITION LIMITS OF INACTIVE ORIGINAL ALLOYS.....	14
CROSS REFERENCE OF CURRENT AND FORMER DESIGNATIONS.....	15
RECOMMENDATION	16
Footnotes	17
Appendix A-Use and Assignment of Designations	18
Appendix B-Deactivation of Registered Alloys	18
Appendix C-Requirements for "Sale of Alloy" and "Commercial Quantity" for Purposes of Registering Aluminum Alloys in the Form of Castings and Ingot.....	18

FOREWORD

Listed herein are designations and chemical composition limits for aluminum alloys in the form of castings or ingot registered with The Aluminum Association. This list is maintained by the Technical Committee on Product Standards of The Aluminum Association. The designations of these compositions were assigned in conformance with the system adopted by The Aluminum Association in 1954 and approved by the American Standards Association (now American National Standards Institute Incorporated) as an American Standard in 1957 (see American National Standard Alloy and Temper Designation Systems for Aluminum ANSI H35.1/H35.1(M)). Additions may be made as required, and alloys will be deleted when no longer in commercial use (see table of inactive alloys printed on page 13).

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.

Effective July/2015, the practice of registering experimental alloys has been discontinued and new experimental alloy designations shall not be granted.

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 rights.



CHEMICAL COMPOSITION LIMITS^{1,2}

Only composition limits which are identical to those listed herein or are registered with The Aluminum Association should be designated as "AA" alloys.

REGISTERED ALLOYS IN THE FORM OF xxx.0 CASTINGS, xxx.1 INGOT AND xxx.2 INGOT.

DESIGNATION		PRO- DUCTS ⁵	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Be	Pb	Sn	Zr		FNS	OTHERS ¹²		Al Min.
AA No.	DATE REGISTERED																		Each	Total ³	
100.1*	1970-06-30	Ingot	0.15	0.6-0.8	0.10	...	...	...	...	0.05	...	...	...	...	...	...	0.025 Mn+Cr+Ti+V	...	0.03	0.10	99.00 ⁴
130.1*	1970-06-30	Ingot	...	...	0.10	...	...	...	...	0.05	...	...	...	...	...	...	0.025 Mn+Cr+Ti+V, 2.5 min. Fe/Si ratio	...	0.03	0.10	99.30 ⁴
150.1*	1970-06-30	Ingot	...	...	0.05	...	...	...	...	0.05	...	...	...	...	...	...	0.025 Mn+Cr+Ti+V, 2.0 min. Fe/Si ratio	...	0.03	0.10	99.50 ⁴
160.1	1976-01-28	Ingot	0.10	0.25	...	...	...	...	...	0.05	...	...	...	...	...	...	0.025 Mn+Cr+Ti+V, 2.0 min. Fe/Si ratio	...	0.03	0.10	99.60 ⁴
170.1*	1970-06-30	Ingot	...	...	...	...	...	...	...	0.05	...	...	...	...	...	...	0.025 Mn+Cr+Ti+V, 1.5 min. Fe/Si ratio	...	0.03	0.10	99.70 ⁴
201.0	1968-04-17	S	0.10	0.15	4.0-5.2	0.20-0.50	0.15-0.55	...	...	...	0.15-0.35	0.40-1.0	...	...	...	...	...	...	0.05	0.10	Rem.
201.2	1968-04-17	Ingot	0.10	0.10	4.0-5.2	0.20-0.50	0.20-0.55	...	...	...	0.15-0.35	0.40-1.0	...	...	...	...	...	...	0.05	0.10	Rem.
A201.0	1970-10-09	S	0.05	0.10	4.0-5.0	0.20-0.40	0.15-0.35	...	...	...	0.15-0.35	0.40-1.0	...	...	...	...	...	...	0.03	0.10	Rem.
A201.1	1970-10-09	Ingot	0.05	0.07	4.0-5.0	0.20-0.40	0.20-0.35	...	...	...	0.15-0.35	0.40-1.0	...	...	...	...	...	...	0.03	0.10	Rem.
B201.0	1984-09-21	S	0.05	0.05	4.5-5.0	0.20-0.50	0.25-0.35	...	...	...	0.15-0.35	0.50-1.0	...	...	...	...	...	...	0.05	0.15	Rem.
203.0	1972-12-02	S	0.30	0.50	4.5-5.5	0.20-0.30	0.10	...	1.3-1.7	0.10	0.15-0.25	...	...	...	...	0.10-0.30	0.20-0.30 Co, 0.20-0.30 Sb, 0.50 Ti + Zr	...	0.05	0.20	Rem.
203.2	1972-12-02	Ingot	0.20	0.35	4.8-5.2	0.20-0.30	0.10	...	1.3-1.7	0.10	0.15-0.25	...	...	...	...	0.10-0.30	0.20-0.30 Co, 0.20-0.30 Sb, 0.50 Ti + Zr	...	0.05	0.20	Rem.
204.0	1974-10-01	S&P	0.20	0.35	4.2-5.0	0.10	0.15-0.35	...	0.05	0.10	0.15-0.30	...	...	...	0.05	...	...	...	0.05	0.15	Rem.
204.2	1974-10-01	Ingot	0.15	0.10-0.20	4.2-4.9	0.05	0.20-0.35	...	0.03	0.05	0.15-0.25	...	...	...	0.05	...	...	...	0.05	0.15	Rem.
+ 205.0	2011-10-26	....	0.10	0.08	4.2-5.0	...	0.20-0.33	...	...	...	0.50	0.6-0.9	...	...	...	...	...	...	0.08	0.17	Rem.
+ 205.2	2011-10-26	Ingot ¹³	0.07	0.05	4.2-5.0	...	0.25-0.33	...	...	...	0.50	0.6-0.9	...	...	...	...	...	...	0.08	0.17	Rem.
206.0	1976-04-23	S&P	0.10	0.15	4.2-5.0	0.20-0.50	0.15-0.35	...	0.05	0.10	0.15-0.30	...	...	...	0.05	...	...	...	0.05	0.15	Rem.
206.2	1976-04-23	Ingot	0.10	0.10	4.2-5.0	0.20-0.50	0.20-0.35	...	0.03	0.05	0.15-0.25	...	...	...	0.05	...	...	...	0.05	0.15	Rem.
A206.0	1976-04-23	S&P	0.05	0.10	4.2-5.0	0.20-0.50	0.15-0.35	...	0.05	0.10	0.15-0.30	...	...	...	0.05	...	...	...	0.05	0.15	Rem.
A206.2	1976-04-23	Ingot	0.05	0.07	4.2-5.0	0.20-0.50	0.20-0.35	...	0.03	0.05	0.15-0.25	...	...	...	0.05	...	...	...	0.05	0.15	Rem.
B206.0	2003-07-07	S&P	0.05	0.10	4.2-5.0	0.20-0.50	0.15-0.35	...	0.05	0.10	0.10	...	...	...	0.05	...	...	...	0.05	0.15	Rem.
B206.2	2003-07-07	Ingot	0.05	0.07	4.2-5.0	0.20-0.50	0.20-0.35	...	0.03	0.05	0.05	...	...	...	0.05	...	...	...	0.05	0.15	Rem.
240.0	....	S	0.50	0.50	7.0-9.0	0.30-0.7	5.5-6.5	...	0.30-0.7	0.10	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.

See footnotes on pages 11-12.

CHEMICAL COMPOSITION LIMITS^{1,2}

Only composition limits which are identical to those listed herein or are registered with The Aluminum Association should be designated as "AA" alloys.

REGISTERED ALLOYS IN THE FORM OF xxx.0 CASTINGS, xxx.1 INGOT AND xxx.2 INGOT.

DESIGNATION		PRO- DUCTS ⁵	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Be	Pb	Sn	Zr		FNs	OTHERS ¹²		Al Min.
AA No.	DATE REGISTERED																		Each	Total ³	
240.1	....	Ingot	0.50	0.40	7.0-9.0	0.30-0.7	5.6-6.5	...	0.30-0.7	0.10	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
242.0	....	S&P	0.7	1.0	3.5-4.5	0.35	1.2-1.8	0.25	1.7-2.3	0.35	0.25	...	...	...	...	...	...	...	0.05	0.15	Rem.
242.1	....	Ingot	0.7	0.8	3.5-4.5	0.35	1.3-1.8	0.25	1.7-2.3	0.35	0.25	...	...	...	...	...	...	...	0.05	0.15	Rem.
242.2	....	Ingot	0.6	0.6	3.5-4.5	0.10	1.3-1.8	...	1.7-2.3	0.10	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
A242.0	....	S	0.6	0.8	3.7-4.5	0.10	1.2-1.7	0.15-0.25	1.8-2.3	0.10	0.07-0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
A242.1	....	Ingot	0.6	0.6	3.7-4.5	0.10	1.3-1.7	0.15-0.25	1.8-2.3	0.10	0.07-0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
A242.2	....	Ingot	0.35	0.6	3.7-4.5	0.10	1.3-1.7	0.15-0.25	1.8-2.3	0.10	0.07-0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
295.0	....	S	0.7-1.5	1.0	4.0-5.0	0.35	0.03	...	...	0.35	0.25	...	...	...	...	...	...	...	0.05	0.15	Rem.
295.1	....	Ingot	0.7-1.5	0.8	4.0-5.0	0.35	0.03	...	...	0.35	0.25	...	...	...	...	...	...	...	0.05	0.15	Rem.
295.2	....	Ingot	0.7-1.2	0.8	4.0-5.0	0.30	0.03	...	...	0.30	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
296.0	....	P	2.0-3.0	1.2	4.0-5.0	0.35	0.05	...	0.35	0.50	0.25	...	...	...	...	...	...	...	...	0.35	Rem.
296.1	....	Ingot	2.0-3.0	0.9	4.0-5.0	0.35	0.05	...	0.35	0.50	0.25	...	...	...	...	...	...	...	...	0.35	Rem.
296.2	....	Ingot	2.0-3.0	0.8	4.0-5.0	0.30	0.03	...	...	0.30	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
301.0	1994-08-02	....	9.5-10.5	0.8-1.5	3.0-3.5	0.50-0.8	0.25-0.50	...	1.0-1.5	0.05	0.20	...	...	...	...	...	...	...	0.03	0.10	Rem.
301.1 ¹⁴	1994-08-02	Ingot ¹³	9.5-10.5	0.8-1.2	3.0-3.5	0.50-0.8	0.30-0.50	...	1.0-1.5	0.05	0.20	...	...	...	...	...	...	...	0.03	0.10	Rem.
302.0	1994-08-02	....	9.5-10.5	0.25	2.8-3.2	...	0.7-1.2	...	1.0-1.5	0.05	0.20	...	...	...	...	...	...	...	0.03	0.10	Rem.
302.1 ¹⁴	1994-08-02	Ingot ¹³	9.5-10.5	0.20	2.8-3.2	...	0.8-1.2	...	1.0-1.5	0.05	0.20	...	...	...	...	...	...	...	0.03	0.10	Rem.
303.0	1994-08-02	....	9.5-10.5	0.8-1.5	0.20	0.50-0.8	0.45-0.7	...	...	0.05	0.20	...	...	...	...	...	...	...	0.03	0.10	Rem.
303.1 ¹⁴	1994-08-02	Ingot ¹³	9.5-10.5	0.8-1.2	0.20	0.50-0.8	0.50-0.7	...	...	0.05	0.20	...	...	...	...	...	...	...	0.03	0.10	Rem.
+ 304.0	2012-04-17	D	9.0-11.5	0.8-1.2	0.05-0.08	0.30-0.50	0.30-0.50	0.05	0.03	0.20	0.03-0.18	...	...	...	0.03	...	...	...	0.03	0.15	Rem.
+ 304.1 ¹⁴	2012-04-17	Ingot	9.0-11.5	0.8-1.0	0.05-0.08	0.30-0.50	0.35-0.50	0.05	0.03	0.20	0.03-0.18	...	...	...	0.03	...	...	...	0.03	0.15	Rem.
308.0	....	S&P	5.0-6.0	1.0	4.0-5.0	0.50	0.10	...	...	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
308.1 ¹⁴	....	Ingot	5.0-6.0	0.8	4.0-5.0	0.50	0.10	...	...	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
308.2 ¹⁴	....	Ingot	5.0-6.0	0.8	4.0-5.0	0.30	0.10	...	...	0.50	0.20	...	...	...	...	...	...	...	...	0.50	Rem.
318.0	1991-01-29	S&P	5.5-6.5	1.0	3.0-4.0	0.50	0.10-0.6	...	0.35	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
318.1 ¹⁴	1991-01-29	Ingot	5.5-6.5	0.8	3.0-4.0	0.50	0.15-0.6	...	0.35	0.9	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
319.0	....	S&P	5.5-6.5	1.0	3.0-4.0	0.50	0.10	...	0.35	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
319.1 ¹⁴	....	Ingot	5.5-6.5	0.8	3.0-4.0	0.50	0.10	...	0.35	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
319.2 ¹⁴		Ingot	5.5-6.5	0.6	3.0-4.0	0.10	0.10	...	0.10	0.10	0.20	...	...	...	...	...	...	...	...	0.20	Rem.

See footnotes on pages 11-12.

CHEMICAL COMPOSITION LIMITS^{1,2}

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REGISTERED ALLOYS IN THE FORM OF xxx.0 CASTINGS, xxx.1 INGOT AND xxx.2 INGOT.

DESIGNATION		PRO- DUCTS ⁵	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Be	Pb	Sn	Zr		FNs	OTHERS ¹²		Al Min.
AA No.	DATE REGISTERED																		Each	Total ³	
A319.0	1970-08-28	S&P	5.5-6.5	1.0	3.0-4.0	0.50	0.10	...	0.35	3.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
A319.1 ¹⁴	1970-08-28	Ingot	5.5-6.5	0.8	3.0-4.0	0.50	0.10	...	0.35	3.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
B319.0	1981-10-30	S&P	5.5-6.5	1.2	3.0-4.0	0.8	0.10-0.50	...	0.50	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
B319.1 ¹⁴	1981-10-30	Ingot	5.5-6.5	0.9	3.0-4.0	0.8	0.15-0.50	...	0.50	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
320.0	1982-04-08	S&P	5.0-8.0	1.2	2.0-4.0	0.8	0.05-0.6	...	0.35	3.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
320.1 ¹⁴	1982-04-08	Ingot	5.0-8.0	0.9	2.0-4.0	0.8	0.10-0.6	...	0.35	3.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
328.0	2003-07-09 ¹⁸	S	7.5-8.5	1.0	1.0-2.0	0.20-0.6	0.20-0.6	0.35	0.25	1.5	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
328.1 ¹⁴	2003-07-09 ¹⁸	Ingot	7.5-8.5	0.8	1.0-2.0	0.20-0.6	0.25-0.6	0.35	0.25	1.5	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
332.0	....	P	8.5-10.5	1.2	2.0-4.0	0.50	0.50-1.5	...	0.50	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
332.1 ¹⁴	....	Ingot	8.5-10.5	0.9	2.0-4.0	0.50	0.6-1.5	...	0.50	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
332.2 ¹⁴	....	Ingot	8.5-10.0	0.6	2.0-4.0	0.10	0.9-1.3	...	0.10	0.10	0.20	...	...	...	...	...	...	...	...	0.30	Rem.
333.0	....	P	8.0-10.0	1.0	3.0-4.0	0.50	0.05-0.50	...	0.50	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
333.1 ¹⁴	....	Ingot	8.0-10.0	0.8	3.0-4.0	0.50	0.10-0.50	...	0.50	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
A333.0	1970-08-28	P	8.0-10.0	1.0	3.0-4.0	0.50	0.05-0.50	...	0.50	3.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
A333.1 ¹⁴	1970-08-28	Ingot	8.0-10.0	0.8	3.0-4.0	0.50	0.10-0.50	...	0.50	3.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
336.0	....	P	11.0-13.0	1.2	0.50-1.5	0.35	0.7-1.3	...	2.0-3.0	0.35	0.25	...	...	...	...	...	...	...	0.05	...	Rem.
336.1 ¹⁴	....	Ingot	11.0-13.0	0.9	0.50-1.5	0.35	0.8-1.3	...	2.0-3.0	0.35	0.25	...	...	...	...	...	...	...	0.05	...	Rem.
336.2 ¹⁴	....	Ingot	11.0-13.0	0.9	0.50-1.5	0.10	0.9-1.3	...	2.0-3.0	0.10	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
339.0	....	P	11.0-13.0	1.2	1.5-3.0	0.50	0.50-1.5	...	0.50-1.5	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
339.1 ¹⁴	....	Ingot	11.0-13.0	0.9	1.5-3.0	0.50	0.6-1.5	...	0.50-1.5	1.0	0.25	...	...	...	...	...	...	...	...	0.50	Rem.
354.0	....	P	8.6-9.4	0.20	1.6-2.0	0.10	0.40-0.6	...	...	0.10	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
354.1 ¹⁴	....	Ingot	8.6-9.4	0.15	1.6-2.0	0.10	0.45-0.6	...	...	0.10	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
354.2 ¹⁴	1997-07-21	Ingot	8.6-9.4	0.06	1.6-2.0	0.10	0.45-0.6	...	...	0.10	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
355.0	....	S&P	4.5-5.5	0.6 ⁷	1.0-1.5	0.50 ⁷	0.40-0.6	0.25	...	0.35	0.25	...	...	...	...	...	...	...	0.05	0.15	Rem.
355.1 ¹⁴	....	Ingot	4.5-5.5	0.50 ⁷	1.0-1.5	0.50 ⁷	0.45-0.6	0.25	...	0.35	0.25	...	...	...	...	...	...	...	0.05	0.15	Rem.
355.2 ¹⁴	....	Ingot	4.5-5.5	0.14-0.25	1.0-1.5	0.05	0.50-0.6	...	...	0.05	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
A355.0	1981-09-17	S&P	4.5-5.5	0.09	1.0-1.5	0.05	0.45-0.6	...	...	0.05	0.04-0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
A355.2 ¹⁴	1981-09-17	Ingot	4.5-5.5	0.06	1.0-1.5	0.03	0.50-0.6	...	...	0.03	0.04-0.20	...	...	...	...	...	...	...	0.03	0.10	Rem.
C355.0	....	S&P	4.5-5.5	0.20	1.0-1.5	0.10	0.40-0.6	...	...	0.10	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.

See footnotes on pages 11-12.

CHEMICAL COMPOSITION LIMITS^{1,2}

Only composition limits which are identical to those listed herein or are registered with The Aluminum Association should be designated as "AA" alloys.

REGISTERED ALLOYS IN THE FORM OF xxx.0 CASTINGS, xxx.1 INGOT AND xxx.2 INGOT.

DESIGNATION		PRO- DUCTS ⁵	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ag	Be	Pb	Sn	Zr		FNs	OTHERS ¹²		Al Min.
AA No.	DATE REGISTERED																		Each	Total ³	
C355.1 ¹⁴	1974-06-04	Ingot	4.5-5.5	0.15	1.0-1.5	0.10	0.45-0.6	...	...	0.10	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
C355.2 ¹⁴	....	Ingot	4.5-5.5	0.13	1.0-1.5	0.05	0.50-0.6	...	...	0.05	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
356.0	....	S&P	6.5-7.5	0.6 ⁷	0.25	0.35 ⁷	0.20-0.45	...	...	0.35	0.25	...	...	...	...	...	...	...	0.05	0.15	Rem.
356.1 ¹⁴	....	Ingot	6.5-7.5	0.50 ⁷	0.25	0.35 ⁷	0.25-0.45	...	...	0.35	0.25	...	...	...	...	...	...	...	0.05	0.15	Rem.
356.2 ¹⁴	....	Ingot	6.5-7.5	0.13-0.25	0.10	0.05	0.30-0.45	...	...	0.05	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
A356.0	....	S&P	6.5-7.5	0.20	0.20	0.10	0.25-0.45	...	...	0.10	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
A356.1 ¹⁴	1974-06-04	Ingot	6.5-7.5	0.15	0.20	0.10	0.30-0.45	...	...	0.10	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
A356.2 ¹⁴	....	Ingot	6.5-7.5	0.12	0.10	0.05	0.30-0.45	...	...	0.05	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
B356.0	1981-09-17	S&P	6.5-7.5	0.09	0.05	0.05	0.25-0.45	...	...	0.05	0.04-0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
B356.2 ¹⁴	1981-09-17	Ingot	6.5-7.5	0.06	0.03	0.03	0.30-0.45	...	...	0.03	0.04-0.20	...	...	...	...	...	...	...	0.03	0.10	Rem.
C356.0	1985-05-30	S&P	6.5-7.5	0.07	0.05	0.05	0.25-0.45	...	...	0.05	0.04-0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
C356.2 ¹⁴	1985-05-30	Ingot	6.5-7.5	0.04	0.03	0.03	0.30-0.45	...	...	0.03	0.04-0.20	...	...	...	...	...	...	...	0.03	0.10	Rem.
F356.0	1971-10-20	S&P	6.5-7.5	0.20	0.20	0.10	0.17-0.25	...	...	0.10	0.04-0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
F356.2 ¹⁴	1971-10-20	Ingot	6.5-7.5	0.12	0.10	0.05	0.17-0.25	...	...	0.05	0.04-0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
357.0	....	S&P	6.5-7.5	0.15	0.05	0.03	0.45-0.6	...	...	0.05	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
357.1 ¹⁴	....	Ingot	6.5-7.5	0.12	0.05	0.03	0.45-0.6	...	...	0.05	0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
A357.0	....	S&P	6.5-7.5	0.20	0.20	0.10	0.40-0.7	...	...	0.10	0.04-0.20	...	0.04-0.07	...	...	...	...	...	0.05	0.15	Rem.
A357.2 ¹⁴	....	Ingot	6.5-7.5	0.12	0.10	0.05	0.45-0.7	...	...	0.05	0.04-0.20	...	0.04-0.07	...	...	...	...	...	0.03	0.10	Rem.
B357.0	1981-09-17	S&P	6.5-7.5	0.09	0.05	0.05	0.40-0.6	...	...	0.05	0.04-0.20	...	...	...	...	...	...	...	0.05	0.15	Rem.
B357.2 ¹⁴	1981-09-17	Ingot	6.5-7.5	0.06	0.03	0.03	0.45-0.6	...	...	0.03	0.04-0.20	...	...	...	...	...	...	...	0.03	0.10	Rem.
C357.0	1981-09-17	S&P	6.5-7.5	0.09	0.05	0.05	0.45-0.7	...	...	0.05	0.04-0.20	...	0.04-0.07	...	...	...	...	...	0.05	0.15	Rem.
C357.2 ¹⁴	1981-09-17	Ingot	6.5-7.5	0.06	0.03	0.03	0.50-0.7	...	...	0.03	0.04-0.20	...	0.04-0.07	...	...	...	...	...	0.03	0.10	Rem.
D357.0	1984-09-21	S	6.5-7.5	0.20	...	0.10	0.55-0.6	...	...	...	0.10-0.20	...	0.04-0.07	...	...	...	...	...	0.05	0.15	Rem.
E357.0	2001-06-06	S, P & I	6.5-7.5	0.10	...	0.10	0.55-0.6	...	...	...	0.10-0.20	...	0.002	...	...	...	...	...	0.05	0.15	Rem.
E357.1 ¹⁴	2001-06-06	Ingot	6.5-7.5	0.07	...	0.10	0.6-0.7	...	...	...	0.10-0.20	...	0.002	...	...	...	...	...	0.05	0.15	Rem.
E357.2 ¹⁴	2001-06-06	Ingot	6.5-7.5	0.07	...	0.10	0.6-0.7	...	...	...	0.10-0.20	...	0.0003	...	...	...	...	...	0.05	0.15	Rem.
F357.0	2001-06-06	S, P & I	6.5-7.5	0.10	0.20	0.10	0.40-0.7	...	...	0.10	0.04-0.20	...	0.002	...	...	...	...	...	0.05	0.15	Rem.
F357.1 ¹⁴	2001-06-06	Ingot	6.5-7.5	0.07	0.20	0.10	0.45-0.7	...	...	0.10	0.04-0.20	...	0.002	...	...	...	...	...	0.05	0.15	Rem.
F357.2 ¹⁴	2001-06-06	Ingot	6.5-7.5	0.07	0.20	0.10	0.45-0.7	...	...	0.10	0.04-0.20	...	0.0003	...	...	...	...	...	0.05	0.15	Rem.

See footnotes on pages 11-12.