
REGISTRATION RECORD SERIES



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

Unified North American and International Registration Records

The Aluminum Association

Incorporated

900 19th Street, N.W., Washington, D.C. 20006

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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 18 through 20. Additions may be made in accordance with the rules outlined in the Declaration of Accord printed on page 21, and alloys will be deleted when no longer in commercial use (see table of inactive alloys).

This edition of the *International Alloy Designations and Chemical Composition Limits for Wrought Aluminum and Wrought Aluminum Alloys* combines the North American (Green Sheets) and the International (Blue Sheets) registration records into one publication and includes significant additions and modifications. Some of the more significant changes to this edition include:

1. A revised 1998 "Recommendation" which incorporates approved revisions to the registration rules since 1970, including addition of a footnote to define "original" alloy.
2. Addition of a table showing the nominal densities for active alloys.
3. Revised Table of Inactive Alloys to include deactivation dates.
4. Revised footnote 19 to expand and clarify reactivation rules.
5. Addition of a table listing the chemical composition limits for inactive original alloys.

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. The "X" is dropped when the alloy is no longer experimental.
3. 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.

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 21 of this publication.

The Aluminum Association Inc. 900 19th Street, N.W. Washington, D.C. 20006 <u>USA</u>	USA	Belgian Aluminium Association Lakenweversstraat 21 Rue des Drapiers B-1050, Bruxelles <u>BELGIUM</u>	BELGIUM
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CHEMICAL COMPOSITION LIMITS^{1,2}

Only composition limits which are identical to those listed herein for a registered designation are applicable to that designation.

NATURAL IMPURITY LIMITS FOR WROUGHT UNALLOYED ALUMINUM

REGISTERED DESIGNATION														OTHERS ^{3g}		ALUMINUM
AA No.	DATE	BY	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ca	V	Each	Total ³	Minimum
1035	1973-08-22	USA	0.35	0.6	0.10	0.05	0.05	...	...	0.10	0.03	...	0.05	0.03	...	99.35 ^d
1040	1973-08-22	USA	0.30	0.50	0.10	0.05	0.05	...	...	0.10	0.03	...	0.05	0.03	...	99.40 ^d
1045	1973-08-22	USA	0.30	0.45	0.10	0.05	0.05	...	...	0.05	0.03	...	0.05	0.03	...	99.45 ^d
1050	1984-07-01	USA	0.25	0.40	0.05	0.05	0.05	...	...	0.05	0.03	...	0.05	0.03	...	99.50 ^d
1050A	1972-09-22	EEA	0.25	0.40	0.05	0.05	0.05	...	...	0.07	0.05	...	...	0.03	...	99.50 ^d
1060	1984-07-01	USA	0.25	0.35	0.05	0.03	0.03	...	...	0.05	0.03	...	0.05	0.03	...	99.60 ^d
1065	1973-08-22	USA	0.25	0.30	0.05	0.03	0.03	...	...	0.05	0.03	...	0.05	0.03	...	99.65 ^d
1070	1984-07-01	USA	0.20	0.25	0.04	0.03	0.03	...	...	0.04	0.03	...	0.05	0.03	...	99.70 ^d
1070A	1972-09-22	EEA	0.20	0.25	0.03	0.03	0.03	...	...	0.07	0.03	...	...	0.03	...	99.70 ^d
1080	1984-07-01	USA	0.15	0.15	0.03	0.02	0.02	...	...	0.03	0.03	0.03	0.05	0.02	...	99.80 ^d
1080A	1972-09-22	EEA	0.15	0.15	0.03	0.02	0.02	...	...	0.06	0.02	0.03	...	0.02	...	99.80 ^d
1085	1984-07-01	USA	0.10	0.12	0.03	0.02	0.02	...	...	0.03	0.02	0.03	0.05	0.01	...	99.85 ^d
1090	1984-07-01	USA	0.07	0.07	0.02	0.01	0.01	...	...	0.03	0.01	0.03	0.05	0.01	...	99.90 ^d
1098	1972-02-15	GERMANY	0.010	0.006	0.003	...	...	...	...	0.015	0.003	...	...	0.003	...	99.98 ⁵

REGISTERED COMPOSITIONS

REGISTERED DESIGNATION														OTHERS ^{3g}		ALUMINUM
AA No.	DATE	BY	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ca	V	Each	Total ³	Minimum
1100	1984-07-01	USA	0.95 Si + Fe	0.05-0.20	0.05	0.05	...	...	...	0.10	...	...	...	0.05	0.15	99.00 ^d
1200	1986-05-23	USA	1.00 Si + Fe	0.05	0.05	0.05	...	...	...	0.10	0.05	...	...	0.05	0.15	99.00 ^d
1200A	1991-03-22	NORWAY	1.00 Si + Fe	0.10	0.30	0.30	0.30	0.10	...	0.10	...	...	...	0.05	0.15	99.00 ^d
1110	1987-06-15	FRANCE	0.30	0.8	0.04	0.01	0.25	0.01	...	...	...	...	0.02 B, 0.03 V + Ti	0.03	...	99.10 ^d
1120	1982-07-07	AUSTRALIA	0.10	0.40	0.05-0.35	0.01	0.20	0.01	...	0.05	...	0.03	0.05 B, 0.02 V + Ti	0.03	0.10	99.20 ^d
1230 ⁶⁶	1984-07-01	USA	0.70 Si + Fe	0.10	0.10	0.05	0.05	...	...	0.10	0.03	...	0.05	0.03	...	99.30 ^d
1235	1984-07-01	USA	0.65 Si + Fe	0.05	0.05	0.05	0.05	...	...	0.10	0.06	...	0.05	0.03	...	99.35 ^d
1435	1988-03-05	USA	0.15	0.30-0.50	0.02	0.05	0.05	...	...	0.10	0.03	...	0.05	0.03	...	99.35 ^d
1145	1984-07-01	USA	0.55 Si + Fe	0.05	0.05	0.05	0.05	...	...	0.05	0.03	...	0.05	0.03	...	99.45 ^d
1345	1986-10-08	USA	0.30	0.40	0.10	0.05	0.05	...	...	0.05	0.03	...	0.05	0.03	...	99.45 ^d
1445	1973-08-14	AUSTRALIA	0.50 Si + Fe ²⁰	0.04 ²⁰	...	...	...	...	...	...	...	...	...	...	0.05	99.45 ^d
1150	1973-08-02	AUSTRALIA	0.45 Si + Fe	0.05-0.20	0.05	0.05	0.05	...	...	0.05	0.03	...	...	0.03	...	99.50 ^d
1350 ⁷	1975-01-24	USA	0.10	0.40	0.05	0.01	...	...	...	0.05	...	0.03	0.05 B, 0.02 V + Ti	0.03	0.10	99.50 ^d
1350A	1979-02-15	GERMANY	0.25	0.40	0.02	...	0.05	0.01	...	0.05	...	0.03	0.03 Cr + Mn + Ti + V	0.03	...	99.50 ^d
1450	1980-11-14	EEA	0.25	0.40	0.05	0.05	0.05	...	...	0.07	0.10-0.20	...	...	0.03	...	99.50 ^d
1260	1984-07-01	USA	0.40 Si + Fe	0.04	0.04	0.01	0.03	...	...	0.05	0.03	...	0.05	0.03	...	99.60 ^d

See footnotes on page 10.

CHEMICAL COMPOSITION LIMITS^{1,2}

REGISTERED COMPOSITION—Continued

Only composition limits which are identical to those listed herein for a registered designation are applicable to that designation.

REGISTERED DESIGNATION			OTHERS ^{3,9}											ALUMINUM	
AA No.	DATE	BY	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	Each	Total ³
1370	1976-04-20	FRANCE	0.10	0.25	0.02	0.01	0.02	0.01	...	0.04	...	0.03	...	0.02	0.10
1275	1966-03-24	SPAIN	0.06	0.12	0.05-0.10	0.02	0.02	...	...	0.03	0.02	0.03	0.03	0.01	...
1185	1954-07-01	USA	0.15 Si + Fe	0.08 ⁷	0.01	0.02	0.02	...	...	0.03	0.02	0.03	0.05	0.01	...
1285	1954-07-01	USA	0.06 ⁷	0.08 ⁷	0.02	0.01	0.01	...	...	0.03	0.02	0.03	0.05	0.01	...
1365	1967-06-15	FRANCE	0.05	0.12	0.02	0.01	0.02	0.01	...	0.03	...	0.03	...	0.01	...
1188	1954-07-01	USA	0.06	0.06	0.005	0.01	0.01	...	...	0.03	0.01	0.03	0.05	0.01	...
1190	1967-06-15	FRANCE	0.05	0.07	0.01	0.01	0.01	0.01	...	0.02	...	0.02	...	0.01	...
1193	1964-09-29	USA	0.04	0.04	0.006	0.01	0.01	...	...	0.03	0.01	0.03	0.05	0.01	...
1196	1980-10-04	FRANCE	0.010	0.006	0.006	0.006	...	...	...	0.010	0.006	0.006	...	0.003	...
1199	1956-03-12	USA	0.006	0.006	0.006	0.002	0.006	...	...	0.006	0.002	0.005	0.005	0.002	...
2001	1979-06-22	FRANCE	0.20	0.20	5.2-6.0	0.15-0.50	0.20-0.45	0.10	0.05	0.10	0.20	...	...	0.05	0.15
2002	1975-06-25	FRANCE	0.35-0.8	0.30	1.5-2.5	0.20	0.50-1.0	0.20	...	0.20	0.20	...	...	0.05	0.15
2004	1980-04-07	UK	0.20	0.20	5.5-6.5	0.10	0.50	...	...	0.10	0.05	...	...	0.05	0.15
2005	1983-01-10	ARGENTINA	0.8	0.7	3.5-5.0	1.0	0.20-1.0	0.10	0.20	0.50	0.20	...	...	0.05	0.15
2006	1983-01-10	ARGENTINA	0.8-1.3	0.7	1.0-2.0	0.6-1.0	0.50-1.4	...	0.20	0.20	0.30	...	...	0.05	0.15
2007	1979-02-15	GERMANY	0.8	0.8	3.3-4.6	0.50-1.0	0.40-1.8	0.10	0.20	0.8	0.20	...	...	0.10	0.30
2008	1967-07-01	USA	0.50-0.8	0.40	0.7-1.1	0.30	0.25-0.50	0.10	...	0.25	0.10	...	0.05	0.05	0.15
2009	1980-01-24	USA	0.25	0.05	3.2-4.4	...	1.0-1.6	...	...	0.10	...	...	...	0.05	0.15
2010	1980-09-21	USA	0.50	0.50	0.7-1.3	0.10-0.40	0.40-1.0	0.15	...	0.30	...	...	...	0.05	0.15
2011	1954-07-01	USA	0.40	0.7	5.0-6.0	...	...	...	...	0.30	...	...	...	0.05	0.15
2011A	1982-02-11	SWITZERLAND	0.40	0.50	4.5-6.0	...	...	...	...	0.30	...	...	...	0.05	0.15
2111	1983-07-07	USA	0.40	0.7	5.0-6.0	...	...	...	...	0.30	...	...	...	0.05	0.15
2012	1983-06-23	USA	0.40	0.7	4.0-5.5	...	...	...	...	0.30	...	...	...	0.05	0.15
2014	1954-07-01	USA	0.50-1.2	0.7	3.9-5.0	0.40-1.2	0.20-0.8	0.10	...	0.25	0.15	...	...	0.05	0.15
2014A	1976-06-30	AECMA	0.50-0.9	0.50	3.9-5.0	0.40-1.2	0.20-0.8	0.10	0.10	0.25	0.15	...	...	0.05	0.15
2214	1954-07-01	USA	0.50-1.2	0.30	3.9-5.0	0.40-1.2	0.20-0.8	0.10	...	0.25	0.15	...	...	0.05	0.15
2017	1954-07-01	USA	0.20-0.8	0.7	3.5-4.5	0.40-1.0	0.40-0.8	0.10	...	0.25	0.15	...	...	0.05	0.15
2017A	1972-09-22	EAA	0.20-0.8	0.7	3.5-4.5	0.40-1.0	0.40-1.0	0.10	...	0.25	...	...	...	0.05	0.15
2117	1954-07-01	USA	0.8	0.7	2.2-3.0	0.20	0.20-0.50	0.10	...	0.25	...	...	...	0.05	0.15
2018	1954-07-01	USA	0.9	1.0	3.5-4.5	0.20	0.45-0.9	0.10	1.7-2.3	0.25	...	...	...	0.05	0.15
2218	1954-07-01	USA	0.9	1.0	3.5-4.5	0.20	1.2-1.8	0.10	1.7-2.3	0.25	...	...	...	0.05	0.15
2018A	1972-09-22	EAA	0.15-0.25	0.9-1.3	1.9-2.7	...	1.3-1.8	...	0.9-1.2	0.15	0.04-0.10	...	...	0.05	0.15
2218A	1972-09-22	EAA	0.15-0.25	0.9-1.4	1.8-2.7	0.25	1.2-1.8	...	0.8-1.4	0.15	0.20	...	...	0.05	0.15
2219 ¹⁰	1954-06-13	USA	0.20	0.30	5.8-6.8	0.20-0.40	0.02	...	...	0.10	0.02-0.10	...	0.05-0.15	0.05	0.15
2319	1988-06-05	USA	0.20	0.30	5.8-6.8	0.20-0.40	0.02	...	...	0.10	0.10-0.20	...	0.05-0.15	0.05	0.15
2419	1972-10-12	USA	0.15	0.18	5.8-6.8	0.20-0.40	0.02	...	...	0.10	0.02-0.10	...	0.05-0.15	0.05	0.15
2519	1985-02-07	USA	0.25 ^{2,8}	0.30 ^{2,8}	5.3-6.4	0.10-0.50	0.05-0.40	...	...	0.10	0.02-0.10	...	0.05-0.15	0.05	0.15
2021	1981-05-28	UK	0.20	0.30	5.8-6.8	0.20-0.40	0.02	...	...	0.10	0.02-0.10	...	0.05-0.15	0.05	0.15

See footnotes on page 10.

CHEMICAL COMPOSITION LIMITS^{1,2}

REGISTERED COMPOSITION—Continued

Only composition limits which are identical to those listed herein for a registered designation are applicable to that designation.

REGISTERED DESIGNATION														OTHERS ^{2,9}		ALUMINUM
AA No.	DATE	BY	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ca	V	Each	Total ³	Minimum
2024	1964-07-01	USA	0.50	0.50	3.8-4.9	0.30-0.9	1.2-1.8	0.10	...	0.25	0.15	...	...	0.05	0.15	Remainder
2024A	1966-02-14	FRANCE	0.15	0.20	3.7-4.5	0.15-0.8	1.2-1.5	0.10	...	0.25	0.15	...	...	0.05	0.15	Remainder
2124	1970-10-02	USA	0.20	0.30	3.8-4.9	0.30-0.9	1.2-1.8	0.10	...	0.25	0.15	...	...	0.05	0.15	Remainder
2224	1978-05-04	USA	0.12	0.15	3.8-4.4	0.30-0.9	1.2-1.8	0.10	...	0.25	0.15	...	...	0.05	0.15	Remainder
2224A	1987-10-10	RUSSIA	0.10	0.15	3.8-4.5	0.40-0.8	1.2-1.6	...	0.05	0.10	0.01-0.07	...	...	0.05	0.15	Remainder
2324	1978-05-04	USA	0.10	0.12	3.8-4.4	0.30-0.9	1.2-1.8	0.10	...	0.25	0.15	...	...	0.05	0.15	Remainder
2424	1984-01-28	USA	0.10	0.12	3.8-4.4	0.30-0.6	1.2-1.8	...	...	0.20	0.10	...	...	0.05	0.15	Remainder
2424A	1984-01-28	USA	0.06	0.12	4.0-4.5	0.40-0.7	1.2-1.6	0.05	...	0.15	0.10	...	...	0.05	0.15	Remainder
2524	1964-07-01	USA	0.50-1.2	1.0	3.9-5.0	0.40-1.2	0.05	0.10	...	0.25	0.15	...	...	0.05	0.15	Remainder
2630	1972-09-22	EAA	0.8	0.7	3.3-4.5	0.20-1.0	0.50-1.3	0.10	...	0.50	0.20	...	0.20 Bl, 0.8-1.5 Pb	0.10	0.30	Remainder
2631	1974-02-05	UK	0.50-1.3	0.6-1.2	1.8-2.8	0.50	0.6-1.2	...	0.6-1.4	0.20	0.20	...	...	0.05	0.15	Remainder
2634	1983-01-18	USA	0.10	0.12	4.2-4.8	0.8-1.3	1.3-1.9	0.05	...	0.20	0.15	...	0.08-0.15 Zr	0.05	0.15	Remainder
2636	1970-08-13	USA	0.50	0.50	2.2-3.0	0.10-0.40	0.30-0.6	0.10	...	0.25	0.15	...	...	0.05	0.15	Remainder
2637	1977-06-01	USA	0.50	0.50	1.4-2.2	0.10-0.40	0.30-0.8	0.10	...	0.25	0.15	...	...	0.05	0.15	Remainder
2638	1980-09-23	USA	0.50-1.3	0.6	0.8-1.8	0.10-0.40	0.40-1.0	0.20	...	0.50	0.15	0.05	...	0.05	0.15	Remainder
2648	1972-08-02	USA	0.15	0.20	2.8-3.8	0.20-0.6	1.2-1.8	...	...	0.25	0.10	0.05	...	0.05	0.15	Remainder
2680	1990-03-26	USA	0.10	0.20	3.3-4.1	0.25	1.5-2.2	...	...	0.10	...	...	0.08-0.25 Zr ^{4,5}	0.05	0.15	Remainder
2690	1984-08-06	USA	0.10	0.12	2.4-3.0	0.05	0.25	0.05	...	0.10	0.15	...	0.08-0.15 Zr ²⁰	0.05	0.15	Remainder
2691	1985-08-03	FRANCE	0.20	0.30	1.8-2.5	0.10	1.1-1.9	0.10	...	0.25	0.10	...	0.04-0.16 Zr ³⁵	0.05	0.15	Remainder
2694	1990-06-04	USA	0.12	0.15	4.4-5.2	0.25	0.25-0.8	...	...	0.25	0.10	...	0.04-0.18 Zr ⁴⁶	0.05	0.15	Remainder
2695	1990-06-04	USA	0.12	0.15	3.9-4.6	0.25	0.25-0.8	...	...	0.25	0.10	...	0.04-0.19 Zr ⁴⁷	0.05	0.15	Remainder
2195	1992-11-20	USA	0.12	0.15	3.7-4.3	0.25	0.25-0.8	...	...	0.25	0.10	...	0.08-0.16 Zr ⁵⁹	0.05	0.15	Remainder
X2096	1990-04-29	USA	0.12	0.15	2.3-3.0	0.25	0.25-0.88	...	...	0.25	0.10	...	0.04-0.18 Zr ⁶⁰	0.05	0.15	Remainder
2097	1993-06-30	USA	0.12	0.15	2.5-3.1	0.10-0.6	0.35	...	...	0.35	0.15	...	0.08-0.16 Zr ⁶¹	0.05	0.15	Remainder
2197	1990-09-21	USA	0.10	0.10	2.5-3.1	0.10-0.50	0.25	...	...	0.05	0.12	...	0.08-0.15 Zr ⁶²	0.05	0.15	Remainder
2297	1997-08-18	USA	0.10	0.10	2.5-3.1	0.10-0.50	0.25	...	...	0.05	0.12	...	0.08-0.15 Zr ⁶⁵	0.05	0.15	Remainder
3002	1961-07-03	USA	0.08	0.10	0.15	0.05-0.25	0.05-0.20	...	...	0.05	0.03	...	...	0.05	0.10	Remainder
3102	1972-03-01	USA	0.40	0.7	0.10	0.05-0.40	...	...	...	0.30	0.10	...	...	0.05	0.15	Remainder
3003	1964-07-01	USA	0.6	0.7	0.05-0.20	1.0-1.5	...	...	...	0.10	...	...	...	0.05	0.15	Remainder
3103	1972-09-22	EAA	0.50	0.7	0.10	0.9-1.5	0.30	0.10	...	0.20	...	...	0.10 Zr + Ti	0.05	0.15	Remainder
3103A	1997-03-22	NORWAY	0.50	0.7	0.10	0.7-1.4	0.30	0.10	...	0.20	0.10	...	0.10 Zr + Ti	0.05	0.15	Remainder
3203	1973-08-22	AUSTRALIA	0.6	0.7	0.05	1.0-1.5	...	...	...	0.10	...	...	...	0.05	0.15	Remainder
3004	1954-07-01	USA	0.30	0.7	0.25	1.0-1.5	0.8-1.3	...	...	0.25	...	...	...	0.05	0.15	Remainder
3004A	1985-07-09	AUSTRALIA	0.40	0.7	0.25	0.8-1.5	0.8-1.3	0.10	...	0.25	0.05	0.05 Pb	...	0.05	0.15	Remainder
3104	1976-08-30	USA	0.6	0.8	0.05-0.25	0.8-1.4	0.8-1.3	...	0.05	0.25	0.10	...	...	0.05	0.15	Remainder
3204	1997-07-11	USA	0.30	0.7	0.10-0.25	0.8-1.5	0.8-1.5	...	...	0.25	...	...	...	0.05	0.15	Remainder
3005	1954-07-01	USA	0.6	0.7	0.30	1.0-1.5	0.20-0.6	0.10	...	0.25	0.10	...	...	0.05	0.15	Remainder
3005A	1997-06-12	NORWAY	0.7	0.8	0.30	1.0-1.5	0.20-0.6	0.10	...	0.40	0.10	...	...	0.05	0.15	Remainder
3105	1960-05-27	USA	0.6	0.7	0.30	0.30-0.8	0.20-0.8	0.20	...	0.40	0.10	...	...	0.05	0.15	Remainder
3105A	1980-10-04	FRANCE	0.6	0.7	0.30	0.30-0.8	0.20-0.8	0.20	...	0.25	0.10	...	...	0.05	0.15	Remainder
3105B	1997-06-12	NORWAY	0.7	0.9	0.30	0.30-0.8	0.20-0.8	0.20	...	0.50	0.10	...	0.10 Pb	0.05	0.15	Remainder
3006	1973-08-24	USA	0.50	0.7	0.10-0.30	0.50-0.8	0.30-0.6	0.20	...	0.15-0.40	0.10	...	...	0.05	0.15	Remainder
3007	1976-03-17	USA	0.50	0.7	0.05-0.30	0.30-0.8	0.6	0.20	...	0.40	0.10	...	...	0.05	0.15	Remainder
3107	1977-11-11	SPAIN	0.6	0.7	0.05-0.15	0.40-0.9	...	...	...	0.20	0.10	...	...	0.05	0.15	Remainder
3207	1979-02-15	GERMANY	0.30	0.45	0.10	0.40-0.8	0.10	...	...	0.10	...	...	...	0.05	0.15	Remainder
3207A	1990-11-28	NORWAY	0.35	0.6	0.25	0.30-0.8	0.30	0.20	...	0.40	...	...	...	0.05	0.15	Remainder
3307	1986-08-20	USA	0.6	0.8	0.30	0.50-0.9	0.40	0.20	...	0.40	0.10	...	...	0.05	0.15	Remainder
3009	1978-03-03	GERMANY	1.0-1.8	0.7	0.10	1.2-1.8	0.10	0.05	0.05	0.05	0.10	...	0.10 Zr	0.05	0.15	Remainder
3010	1978-08-25	USA	0.10	0.20	0.03	0.20-0.9	...	0.05-0.40	...	0.05	0.05	...	...	0.03	0.10	Remainder
3011	1978-08-25	USA	0.40	0.7	0.05-0.20	0.8-1.2	...	0.10-0.40	...	0.10	0.10	...	0.10-0.30 Zr	0.05	0.15	Remainder
3012	1983-01-10	ARGENTINA	0.6	0.7	0.10	0.50-1.1	0.10	0.20	...	0.10	0.10	...	...	0.05	0.15	Remainder

See footnotes on page 10.