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RM BISMUTH BASE and FUSIBLE SOLDER ALLOYS

95X: -40 mm Ø x -15 mm

NF: 37 mm Ø x 12 mm

Number	Bi	Cd	In	Pb	Sn	Ag	Al	As	Au	Co	Cu	Fe	Hg	Ni	Sb	Zn	Other
95X BIS40P3A	60.04	0.0051	1.01	0.106	38.24	0.29	0.034	(0.005)	0.0094	0.0158	0.10	0.014	0.024	0.032	0.020	0.0010	Ge: (0.006)
95X BIS40P4B	58.00	0.0092	2.02	0.210	38.24	(0.70)	0.062	(0.007)	0.009	0.0314	0.211	0.047	0.047	0.073	0.144	0.0031	Ge: (0.009)
95X BIS40P1A	57.4	0.0050	0.0164	0.043	42.3	0.035	.	0.0101	.	.	0.0670	(0.001)	.	.	0.092	0.011	
95X 174A	57.1	0.0089	26.08	0.082	16.70	0.0075	.	.	.	.	0.0030	.	.	.	0.086	0.037	Melt 'C: 79
95X 255A	55.7	0.0065	0.010	43.7	0.24	0.0019	.	.	.	.	0.045	.	.	.	0.32	0.035	Melt 'C: 124
95X BIS40P2A	55.25	0.0008	0.0049	0.020	44.66	0.005	0.0021	0.0019	0.0006	0.0012	0.0026	0.0013	(0.0016)	0.0020	0.005	0.0016	Ge: (0.0005)
NF 64-7	Rem	.	0.003	0.076	45.0	1.25	.	0.006	0.011	0.026	0.004	.	.	0.005	0.26	.	
NF 64-6	Rem	.	0.007	0.26	43.1	0.70	.	0.018	0.035	0.039	0.11	.	.	0.042	0.11	.	
NF 64-5	Rem	.	0.098	0.006	42.6	0.99	.	.	.	.	0.076	.	.	.	0.078	.	
NF 64-4	Rem	.	0.075	0.052	42.0	0.40	.	0.010	<0.001	<0.001	0.006	.	.	0.025	0.053	.	
NF 64-3	Rem	.	0.049	0.025	41.4	0.20	.	0.005	.	.	0.049	.	.	0.072	0.026	.	
NF 64-1	Rem	.	0.010	0.098	41.0	0.006	.	0.0006	.	.	0.026	.	.	0.093	0.001	.	
NF 64-2	Rem	.	0.024	0.012	40.5	0.052	.	0.001	.	.	0.15	.	.	0.011	0.013	.	
95X 158	50.2	9.6	0.006	27.0	13.5	0.002	.	.	.	.	0.048	.	.	.	0.057	0.044	Melt 'C: 70
95X BIS50P1A	49.8	0.022	.	.	50.0	.	.	.	.	.	.	0.051	.	0.025	.	0.006	
95X BIS50P3A	49.8	0.015	.	.	48.6	1.50	.	0.073	0.0025	.	.	0.003	.	.	.	0.002	
95X BIS50P2A	49.6	.	.	.	50.3	0.090	0.005	0.002	0.015	.	.	0.007	.	.	.	.	
95X 136A	48.8	0.0092	21.49	18.0	12.05	0.0056	.	.	.	.	0.0028	.	.	.	0.022	0.031	Melt 'C: 58
95X 117A	45.3	4.95	18.72	23.1	8.02	0.0043	.	.	.	.	0.010	.	.	.	0.010	0.0056	Melt 'C: 47
95X BIS70P1A	29.6	.	0.040	.	69.1	1.10	<0.001	0.025	0.0004	.	.	0.010	.	.	.	.	
95X BIS70P2A	32.8	.	0.049	.	65.0	2.01	<0.001	.	.	.	.	.	.	0.029	.	0.001	
95X PBS40P1A	13.8	0.0043	0.005	(43.6)	42.6	0.011	(0.0006)	0.005	.	.	0.025	(0.0006)	.	.	0.016	0.0010	
95X CDS50P1A	0.13	18.1	0.092	31.0	50.1	0.030	<0.002	0.027	.	.	0.26	(0.0022)	.	.	0.113	0.007	Melt 'C: 145

RM CADMIUM ALLOY

Number	Cd	Sn	Units
95X SC34A	(65.99)	34.05	40 mm Ø x 15 mm
95X SC36A	(63.98)	36.09	40 mm Ø x 15 mm

CRM CADMIUM SETS

AVAILABLE IN SETS ONLY, AS GROUPED

Number	As	Cu	Ni	Pb	Sb	Sn	Tl	Set Size
KZ 030101-03 - 1	.	0.0023	0.0010	0.0060	.	.	0.0011	
KZ 030101-03 - 2	.	0.0039	0.0018	0.011	.	.	0.0021	
KZ 030101-03 - 3	.	0.0068	0.00044	0.022	.	.	0.0047	40 mm Ø x 30 mm
KZ 030101-03 - 4	.	0.013	0.0043	0.047	.	.	0.0091	
KZ 030101-03 - 5	.	0.024	0.011	0.12	.	.	0.023	
IMN K1	(0.00030)	.	0.0086	.	0.0064	0.0061	.	
IMN K2	0.0012	.	0.018	.	0.0038	0.0032	.	
IMN K3	0.0010	.	0.063	.	0.0010	0.00065	.	40 mm Ø x 25 mm
IMN K4	0.0056	.	0.11	.	0.0011	0.00091	.	
IMN K5	0.0014	.	0.0054	.	0.00017	.	.	

CRM CHROMIUM ALLOY

~40 mm Ø x ~15 mm

Number	Cr	C	Co	Fe	Mn	Mo	N	Nb	Ni	P	S	Si	W	
219X 20500C *	51.29	0.027	0.012	1.54	0.30	0.1	0.20	0.014	Rem	0.004	0.013	1.38	0.013	* Provisional Analysis

COBALT BASE ALLOYS

= class, where 1 = CRM and 2 = rm analysis listed in mass %

#	Number	Cr	Fe	Mn	Mo	Nb	Ni	W	Al	C	Cu	P	S	Si	Ti	Co
1	112X 14943G	30.64	1.23	1.20	7.94	0.119	0.138	0.060	(0.024)	0.129	0.229	0.006	0.026	0.58	.	.
1	119X ST3L	29.9	3.42	0.887	0.163	.	2.15	12.6	.	2.36	0.032	.	0.0260	0.807	.	.
1	IARM 95D	29.9	0.84	1.47	0.954	0.024	2.99	3.98	0.080	1.06	0.009	0.0053	(0.0003)	0.64	(0.009)	57.9
1	ECRM 378-1D	28.22	0.606	0.0579	0.053	.	0.617	4.43	.	1.181	.	(0.0023)	0.0055	1.172	.	63.52
2	BS 173	27.5	0.19	0.76	5.62	(0.002)	0.14	.	(0.04)	0.046	(0.008)	(0.003)	0.001	0.61	(0.004)	65.0
2	CT ISO074A	27.12	(0.93)	0.78	5.47	.	0.150	<0.01	.	0.089	0.005	0.002	0.002	0.59	.	64.87
1	IMZ 188	26.44	1.14	0.68	0.42	0.045	10.76	7.46	(0.005)	0.526	0.025	0.011	(0.0002)	0.69	(0.007)	51.64
2	IARM 64C	25.4	2.99	0.79	4.72	0.016	9.47	2.39	0.138	0.064	0.019	0.0064	0.0004	0.24	0.007	53.4
1	119X COB1H *	24.5	15.21	0.52	0.45	0.40	22.6	12.02	0.09	0.053	0.06	0.02	0.008	0.55	.	Rem
1	IMZ 186	23.14	0.10	.	.	.	10.22	7.17	0.28	0.59	.	.	.	.	0.19	Rem
2	IARM 97C	22.2	2.37	0.82	0.36	0.023	22.8	14.6	0.19	0.130	0.027	0.011	0.0004	0.47	0.011	35.8
2	111X 12669J	22.04	1.41	0.57	.	2.06	0.62	10.65	.	.	.	.	.	0.71	.	.
2	BS 172A	21.85	1.76	0.77	0.30	0.09	23.7	14.0	0.08	0.098	0.027	(0.011)	(0.0005)	0.37	.	.
2	IARM 97B	21.2	1.92	0.76	0.56	0.022	19.4	12.9	0.08	0.096	0.07	0.009	(0.001)	0.34	0.006	42.5
2	BS 171B	20.5	1.82	1.90	0.65	0.046	10.68	15.1	0.08	0.087	0.035	0.008	<0.001	0.29	.	.
2	111X 12671J	20.5	1.45	0.61	.	1.95	0.88	11.8	.	.	.	.	.	0.51	.	.
1	SRM 1242	20.0	1.80	1.58	.	(0.005)	9.78	15.1	(0.01)	0.126	0.0010	0.002	0.0007	0.016	.	51.5
2	IARM 207A	19.98	0.64	0.015	9.62	0.043	35.19	0.028	0.040	0.007	0.017	0.002	0.0027	0.053	0.91	33.46
1	111X 12673A	18.8	1.70	0.55	.	2.40	1.70	9.8	0.02	0.001	0.10	.	0.021	0.85	.	.
1	IARM 326A	(0.002)	49.6	0.003	(0.002)	0.038	0.037	(0.001)	(0.003)	(0.002)	(0.002)	0.0013	0.0011	0.029	(0.002)	48.4

#	Number	Cr	Fe	Mn	Mo	Nb	Ni	W	Al	C	Cu	P	S	Si	Ti	Co
Number	B	La	Mg	N	O	Pb	Sn	Ta	V	Zr	Units					
112X 14943G	0.0059	.	.	0.056	.	.	.	.	.	.	40 mm Ø x ~15 mm					
119X ST3L	0.127	.	.	0.053	.	.	.	.	.	.	~40 mm Ø x ~15 mm					
IARM 95D	0.0015	.	(0.0002)	0.0417	0.0009	(0.00001)	(0.0001)	(0.03)	0.0100	(0.001)	31 mm Ø x 2 or 18 mm					
ECRM 378-1D	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm					
BS 173	(0.001)	.	.	0.190	(0.002)	.	.	.	(0.01)	.	35 mm Ø x ~7 or 19+ mm					
CT ISO074A	(0.0010)	.	.	0.17	.	.	.	.	0.005	.	30-35 mm Ø x 20-25 mm					
IMZ 188	0.0009	.	.	.	.	.	.	(0.011)	(0.011)	(0.0004)	1/4 of 75 mm Ø cylinder x 20 mm					
IARM 64C	0.0010	.	0.0043	0.113	0.0012	.	<0.01	0.02	0.020	<0.01	31 mm Ø x 18 or 2 mm					
119X COB1H *	* Provisional Analysis			0.09	.	.	.	.	.	.	~40 mm Ø x ~15 mm					
IMZ 186	(0.007)	.	.	.	.	.	.	3.78	.	0.40	1/4 of 78 mm Ø cylinder x 30 mm					
IARM 97C	0.0028	.	0.0010	0.075	0.0007	.	(0.001)	0.04	0.010	(0.007)	31 mm Ø x 18 or 2 mm					
111X 12669J	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm					
BS 172A	(0.003)	0.045	(0.001)	.	.	.	.	(0.024)	0.007	.	38 mm Ø x ~7 or 19+ mm					
IARM 97B	(0.002)	0.005	<0.002	0.014	0.003	.	<0.005	0.019	0.012	(0.001)	31 mm Ø x 18 mm last					
BS 171B	.	.	.	.	.	.	.	.	(0.02)	.	38 mm Ø x ~7 or 19+ mm					
111X 12671J	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 15 mm					
SRM 1242	(0.0001)	.	(0.001)	0.026	.	(0.0001)	(0.001)	(0.01)	0.005	(0.01)	43 mm Ø x 20 mm					
IARM 207A	0.011	.	(0.0005)	0.0031	0.0011	.	.	0.007	0.011	0.003	31 mm Ø x 18 or 2 mm					
111X 12673A	.	.	.	.	.	0.005	0.08	0.06	.	.	40 mm Ø x 15 mm					
IARM 326A	(0.001)	.	(0.001)	0.0004	0.0082	.	<0.001	(0.01)	1.94	0.002	31 mm Ø x 2 or 18 mm					

Number	B	La	Mg	N	O	Pb	Sn	Ta	V	Zr	Units
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Need a larger size?
Most BS items are
available in any height.

LEAD

= class, where 1 = CRM and 2 = RM analysis listed in mass %

#	Number	Ag	As	Bi	Cd	Cu	Ni	Sb	Se	Sn	Te	Zn
1	83X PR1J	0.123	0.0287	0.0551	0.0932	0.0039	0.0004	0.0048	(0.0010)	0.0059	0.0016	0.006
1	83X PR1K	0.1029	0.0338	0.0508	0.074	0.0465	(0.0004)	0.0100	0.0008	0.016	0.0058	(0.002)
1	83X PR4H	0.0114	0.0003	0.0150	0.0081	0.0454	0.0029	0.0050	(0.004)	.	0.0229	.
1	SRM C2417	0.010	0.011	0.010	(<0.0002)	0.010	(<0.0005)	0.010	.	(<0.010)	(<0.0005)	(<0.0005)
2	L01.3	0.0052	0.00013	0.0006	0.00062	0.00243	0.00051	0.00027	.	(0.00007)	0.00061	0.00045
1	83X PR3F	0.0033	0.0017	0.162	0.0479	0.0551	0.0142	0.095	0.0104	0.050	0.0021	(0.0011)
1	83X PR11A	0.0030	0.0095	0.0117	0.0008	0.0551	0.0011	0.497	(0.0001)	0.119	.	.
1	83X PR12A	0.0030	(0.0003)	0.0119	0.0011	0.0353	0.0009	0.0011	(0.0002)	0.0005	.	.
1	83X CU06A *	0.002	<0.001	0.013	<0.001	0.055	<0.001	<0.001	0.0005	<0.001	<0.001	<0.001
1	BCR 287A	0.00152	<0.0000003	0.00673	0.000036	0.000098	0.0000024	0.0000040	<0.000005	<0.000005	<0.00002	<0.00001
1	83X PR5F	0.00113	(0.00017)	0.00201	(0.00003)	0.00015	0.00010	(0.00011)	(0.00018)	(0.00013)	(0.00013)	0.00020
1	SRM C2418	0.0007	(<0.0001)	(<0.0005)	0.0003	(<0.0001)	(<0.0005)	(<0.0001)	.	(<0.0005)	(<0.0005)	(<0.0005)
2	BCS 210e **	0.0001	.	0.0008	.	0.0006	<0.001	<0.002	.	<0.002	.	<0.005
1	BCR 286A	0.0000015	<0.0000002	0.00215	0.0000125	0.000149	0.0000041	0.000010	<0.000005	<0.000005	<0.00001	<0.00001
1	ERM-EB107	.	.	.	0.00261	.	.	.	.	.	.	.
1	ERM-EB108	.	.	.	0.00260	.	.	.	.	.	.	.

Number	Al	Au	Ca	Fe	Hg	In	Mn	Na	Pt	S	Ti	Tl	Units
83X PR1J	.	.	.	(0.0007)	.	0.0356	.	.	(0.0016)	.	.	last	40 mm Ø x 15 mm
83X PR1K	(0.0003)	0.0019	.	.	.	0.0080	.	.	.	.	.	.	~40 mm Ø x ~15 mm
83X PR4H	.	0.0021	.	.	0.019	.	.	.	.	.	0.0021	.	~40 mm Ø x ~15 mm
SRM C2417	(<0.0001)	.	(<0.001)	(<0.0003)	.	.	(<0.0003)	.	.	.	.	.	50 mm Ø x 16 mm
L01.3	.	.	.	.	.	.	.	.	.	.	.	.	50 mm x 50 mm x 20 mm
83X PR3F	.	0.0041	.	.	0.0103	0.0069	.	0.0026	.	.	.	0.0125	40 mm Ø x 15 mm
83X PR11A	.	.	.	(0.0003)	.	.	.	.	.	0.009	.	0.0042	~40 mm Ø x ~15 mm
83X PR12A	.	.	.	(0.0003)	.	.	.	.	.	(0.0002)	.	0.0051	~40 mm Ø x ~15 mm
3X CU06A *	* Provisional Analysis										.	.	~40 mm Ø x ~15 mm
BCR 287A	.	.	.	.	.	.	.	.	.	<0.001	.	0.000073	~40 mm Ø x ~15 mm
83X PR5F	0.00013	.	.	(0.00022)	.	.	.	.	.	.	.	.	60 mm x 60 mm x 12 mm
SRM C2418	(<0.0001)	.	(<0.0005)	(<0.0005)	.	.	(<0.0005)	.	.	.	.	.	~40 mm Ø x ~15 mm
BCS 210e **	<0.001	.	.	0.0005	.	.	<0.001	.	.	.	0.001	.	50 mm Ø x 16 mm
BCR 286A	.	.	.	.	.	.	.	.	.	.	.	0.00025	500 g (10.5 x 2 x 2 cms)
ERM-EB107	.	.	.	.	0.00113	.	.	.	.	.	.	.	60 mm x 60 mm x 12 mm
ERM-EB108	.	.	.	.	0.00083	.	.	.	.	.	.	.	40 mm Ø x 40 mm

** BCS 210e has a certified melting point of 327.3 °C and Pb: 99.996

CRM

REFINED LEAD SET

available in SET/7 ONLY

analysis listed in mg/kg

40 mm Ø x 27 mm

Number	Ag	As	Bi	Ca	Cd	Cu	Fe	In	Mn	Ni	Sb	Se	Sn	Te	Tl	Zn
IMN PL 1	193	3.6	729	.	.	7.3	4.5	(64.3)	(0.20)	136	15.4	.	3.0	145	569	6.0
IMN PL 2	97.0	2.6	460	.	218	14.9	4.4	(6.4)	(0.17)	159	7.2	33.3	2.6	349	228	(1.7)
IMN PL 3	17.0	2.5	101	(3.4)	15.7	105	(2.4)	5.9	(0.60)	39.4	8.0	2.7	2.1	235	26.4	1.8
IMN PL 4	10.3	345	59.9	.	5.1	197	.	.	.	8.5	3.4	2.7	.	23.6	21.5	.
IMN PL 5	27.3	159	296	.	.	9.1	.	287	.	6.7	572	.	13.7	13.6	135	.
IMN PL 6	64.3	318	48.3	(81.1)	623	4.7	(2.0)	104	(0.50)	5.5	310	.	7.6	8.2	494	.
IMN PL 7	151	(74.3)	61.7	.	53.2	6.8	.	.	.	.	77.7	.	26.3	270	99.2	3.5

LEAD BINARY

available individually

typical analysis

cast

typical analysis

40 mm Ø x 15 mm

Class	Number	Sn	As	Pb	Sb	Units
CRM	91X S63P	63.30	.	SOLD OUT	.	40 mm Ø x 15 mm
RM	91X S50PE	50.0	.	Rem	.	40 mm Ø x 15 mm
RM	91X S40PD	40.0	.	Rem	.	40 mm Ø x 15 mm
RM	91X S30P	30.0	.	SOLD OUT	.	40 mm Ø x 15 mm
RM	NF 23	30.0	.	Rem	.	37 mm Ø x 12 mm
RM	NF 22	25.0	.	Rem	.	37 mm Ø x 12 mm
RM	NF 20	15.2	.	Rem	.	37 mm Ø x 12 mm
RM	NF 19	12.0	.	Rem	.	37 mm Ø x 12 mm
CRM	91X S10PD	10.07	.	Rem	.	40 mm Ø x 15 mm
RM	NF 18	9.80	.	Rem	.	37 mm Ø x 12 mm
RM	NF 17	6.80	.	Rem	.	37 mm Ø x 12 mm
RM	NF 16	3.00	.	Rem	.	37 mm Ø x 12 mm
RM	NF 35	0.97	0.94	Rem	14.0	37 mm Ø x 12 mm

Class	Number	Sb	Ag	As	Bi	Mg
CRM	81X PA12.5D	12.72	.	.	.	.
CRM	81X PA10.0C	9.60	.	.	.	.
CRM	81X PA7.0D	7.02	.	.	.	.
CRM	81X PA3.5E	3.49	.	.	.	.
CRM	81X PA2.0D	1.996	.	.	.	.
CRM	81X PA1.0C	0.989	.	.	.	.
CRM	81X PA0.5C	0.481	.	.	.	.
RM	81X PAS1A	(0.02)	.	1.25	(0.03)	.
RM	81X PMg1A	.	.	.	.	1.15
RM	81X PMg2A	.	.	.	.	0.173
RM	81X PMg3A	.	.	.	.	0.023
RM	82X PAG0.9A	.	0.903	.	.	.
RM	82X PAG0.7A	.	0.733	.	.	.

LEAD AND TIN ALLOYS

CONTINUED ON THE NEXT PAGE

= class, where 1 = CRM and 2 = rm

analysis listed in mass %

* Provisional Analysis

#	Number	Sn	Sb	Ag	As	Bi	Ca	Cd	Cu	Fe	Ni	Te	Zn
1	91X S63PR4A	66.8	0.093	0.030	<0.002	0.030	.	0.021	0.021	<0.005	<0.005	0.006	<0.001
1	91X S63PR3G	64.01	0.243	0.0193	0.0264	0.254	.	0.0009	0.101	0.0078	0.0085	0.0068	0.0061
1	91X S63PJ	62.96	0.011	0.0170	(0.0006)	0.0056	.	(0.0001)	0.0156	0.0015	0.0003	(0.0002)	(0.0003)
1	91X S63PR2J	62.38	0.539	0.054	0.0190	0.144	.	0.0130	0.0733	0.0129	0.0092	0.0032	0.004
1	91X S63Bi1A	61.9	0.470	0.0592	(<0.002)	0.597	.	0.0095	0.105	0.0204	0.0131	0.0012	(0.0022)
1	91X S62AG2A	61.68	0.347	2.03	0.022	0.168	.	0.0016	0.069	0.0065	(0.0016)	.	0.0011
1	91X S63PR1G	61.45	0.052	0.0061	0.0064	0.0588	.	0.0045	0.214	(0.0016)	0.0060	0.0047	(0.0021)
1	91X S63PR0B	60.03	0.0182	0.0097	0.0094	0.0084	.	0.0097	0.0202	(0.0024)	0.0018	0.0034	<0.0005
1	91X S50PR4B	53.06	0.132	0.0704	0.0364	0.114	.	0.0123	1.184	0.0028	0.0171	.	0.032
2	93X S50APR3A	51.5	2.3	0.02	0.02	0.25	.	0.01	0.1	0.005	0.01	.	0.01
2	93X S40APR3A	41.5	1.7	0.02	0.02	0.25	.	0.01	0.1	0.005	0.01	.	0.01
1	91X S40PR2D	40.68	0.596	0.086	0.010	0.154	.	0.0046	0.085	0.0096	0.0050	.	0.0275
1	SRM 1131	39.3	0.43	0.01	0.01	0.06	.	.	0.011	.	0.012	.	.
2	91X S40PR1B	39.0	0.05	0.005	0.005	0.05	.	0.001	0.20	0.015	0.001	.	0.002
1	93X S30APR3C	33.0	0.96	0.021	0.018	0.28	.	0.009	0.008	0.003	0.010	.	0.0053
1	91X S30PR3C	30.88	0.269	0.024	0.0126	0.294	.	0.0115	0.102	0.0016	0.0269	.	(0.003)
1	93X S30APR2C	30.68	1.80	0.049	0.0178	0.168	.	0.0061	0.062	0.0026	0.042	0.0102	0.028
1	91X S30PR2C	30.17	0.619	0.060	0.028	0.158	.	0.0060	0.095	0.009	0.0077	.	0.016
1	93X S30APR1C	28.58	2.54	0.0144	0.010	0.059	.	0.0014	0.192	(0.012)	0.0010	.	(0.0004)
1	86X PSS4B	10.64	15.93	0.0264	0.241	0.102	.	0.0539	0.355	0.0035	0.0010	0.0146	0.012
1	85X SSB8CA	9.70	2.14	0.456	0.075	0.413	.	0.455	.	.	.	0.0037	.
1	86X PSS3B	9.39	14.13	0.0140	0.409	0.0273	.	0.0170	0.489	0.0025	0.0009	0.0050	0.0030
1	91X S10PR1C	9.10	0.0278	0.0078	0.0045	0.0277	.	0.0029	0.0097	(0.0016)	0.0006	.	<0.001
1	86X PSS2B	7.00	8.04	0.0179	1.43	0.0646	.	0.066	0.127	(0.0012)	0.0165	.	0.031
1	SRM 1132	5.84	10.26	.	0.057	0.052	.	.	0.054	<0.001	0.003	.	.
1	86X PSS1B	4.29	11.54	0.0049	0.554	0.195	.	0.0057	0.0249	0.0018	0.0100	.	0.0030
1	84X BA9C	2.94	(0.005)	0.0023	(0.0005)	0.0145	0.118	0.0011	0.0021	.	(0.0001)	(0.0003)	0.0017
1	85X SSCHA	2.64	5.52	0.0134	0.208	0.0441	.	0.0040	0.177	(0.002)	0.010	0.0070	0.0007
1	85X PSN2C	2.06	0.0239	0.0048	0.0048	0.0154	.	0.00065	0.0128	(0.0002)	0.00025	0.0045	(0.0004)
1	BAM EB106	1.72	.	(0.00323)	.	(0.0135)	0.0782	.	.	.	.	.	.
1	84X BA13A	1.716	0.0010	0.0075	0.0008	0.0370	0.0738	0.00143	0.00074	.	.	.	0.0047
1	84X BA12B	1.483	0.0008	0.0051	0.0005	0.0180	0.0667	0.00094	(0.0012)	.	.	.	0.0025
1	BAM EB105	1.43	.	0.00321	.	0.0133	0.0595	.	.	.	.	.	.
1	84X BA11A	1.304	0.0079	0.0023	0.0005	0.0165	0.0552	0.00064	0.0026	.	.	.	0.00050
1	84X BA11B	1.289	(0.005)	0.0025	0.0006	0.0159	0.0546	0.0006	0.0017	.	.	.	0.0006
1	BAM EB104	1.27	.	(0.00293)	.	(0.0126)	0.0530	.	.	.	.	.	.
1	85X ANTHF	1.25	6.25	0.0070	0.183	0.0194	.	0.0039	0.0070	(0.0004)	0.0045	0.0067	0.0005
1	BAM EB102a	1.01	(0.0004)	0.0170	(0.0002)	0.00737	0.0635	.	0.00013	(0.0002)	.	(0.00011)	(0.00005)
1	84X BA14A	0.959	(0.0017)	0.0103	(0.0004)	0.0162	0.076	0.0015	0.0016	.	(0.0002)	(0.0002)	0.0057
1	85X PSB5B	0.94	4.87	0.0257	0.197	0.0195	.	0.0011	0.0346	.	0.0011	0.0018	(0.0017)
1	84X BA15A	0.941	0.0047	0.0095	0.00053	0.0140	0.0865	0.0013	0.0011	.	.	.	0.0062
1	84X BA1K	0.888	0.0009	0.0098	0.0005	0.0146	0.120	0.0014	(0.0013)	.	(0.0001)	(0.0003)	0.0068
1	85X HRHH	0.851	1.106	0.236	0.721	0.0996	.	0.0066	0.073	.	0.0012	0.0023	.
1	83X PR8D	0.604	0.257	0.497	0.134	1.18	.	0.199	0.0448	.	0.0008	0.0014	0.0004
1	83X PR8C	0.603	0.259	0.505	0.155	1.186	.	0.211	0.066	.	0.0020	0.0011	(0.0015)
#	Number	Sn	Sb	Ag	As	Bi	Ca	Cd	Cu	Fe	Ni	Te	Zn
1	84X BA7B	0.594	0.0022	0.0015	(0.0004)	0.0140	0.0391	0.0004	0.0020	.	(0.0003)	(0.0002)	0.0024
1	84X BA2D	0.544	(0.0027)	0.0044	0.0004	0.0230	0.0756	0.0040	(0.0023)	.	(0.0004)	(0.0003)	0.0273
1	82X PAG6.0RA	0.50	0.48	5.93	0.021	0.52	.	0.010	0.18	<0.001	.	.	0.007
2	L21.04	0.45	0.0008	0.0002	.	<0.001	0.1	0.001	0.003	.	<0.0002	.	0.001
1	85X MS2XA	0.392	1.367	0.0043	0.176	0.0188	.	0.0002	0.0277	(0.0001)	0.0004	.	0.0003
1	84X BA20B	0.370	0.0038	0.0295	.	0.0144	0.368	0.0051	.	.	.	.	0.0435
1	84X BA3C	0.341	0.010	0.0082	(0.0006)	0.0411	0.0163	0.0044	0.006	.	(0.0004)	0.0004	(0.0055)
1	84X BA8D	0.325	0.0043	0.0035	0.0005	0.0147	0.136	0.0043	0.0008	.	0.0002	(0.00024)	0.0018
1	SRM C2415a	0.3058	2.981	0.00762	0.1865	0.0507	.	0.00497	0.1022	.	0.00436	0.01034	.
1	BAM EB101a	0.294	(0.00012)	0.00290	(0.0002)	0.0165	0.136	(0.0002)	0.00243	(0.0002)	(0.00006)	(0.0003)	0.00010
1	85X PSb5E	0.285	4.51	0.00177	0.149	0.0134	.	0.00163	0.0493	.	0.00146	0.0029	0.00057
1	85X PSb12B	0.270	11.50	0.0019	0.071	0.0310	.	0.00053	0.330	.	0.0033	0.0056	0.071
2	L21.02	0.27	0.0003	0.008	.	0.01	0.03	<0.0002	0.0013	.	<0.0002	.	0.0016
1	82X PAG3.5RD	0.25	0.106	3.54	0.020	0.290	.	0.0027	0.073	<0.001	.	.	(0.0004)
1	85X 0494 Pb3C	0.245	2.99	0.0212	0.248	0.129	.	.	0.108	(0.0003)	.	0.0145	.
1	84X BA23B	0.237	0.0061	0.0024	.	0.0134	1.052	0.00012	.	.	.	.	0.0026
1	83X PR7B	0.189	0.795	0.290	0.051	0.479	.	0.455	0.176	(0.0008)	(0.0015)	0.0097	(0.0006)
1	BAM EB103	0.183	1.64	0.0066	0.097	0.0158	.	0.000020	0.00097	.	0.00302	.	.
1	84X BA21B	0.162	0.0028	0.0102	.	0.0173	0.552	0.0007	.	.	.	.	0.0155
1	83X PR9A	0.153	.	0.0049	.	.	0.556	0.00073	.	.	.	.	0.0045
1	85X PSB3H	0.15	2.24	0.0046	0.275	0.0191	.	0.0029	0.0308	.	0.0044	0.0053	0.0008
1	84X BA22B	0.128	0.0022	0.0044	.	0.0138	0.799	0.0018	.	.	.	.	0.0053
2	L21.01	0.10	0.0005	0.005	.	0.03	0.05	0.0015	0.0008	.	0.0005	.	0.002
1	85X CADHB	0.096	1.85	0.0076	0.201	0.0292	.	2.09	0.0260	0.0005	0.0045	0.0121	0.044
1	83X PR2G	0.0948	0.0499	0.055	0.0233	0.0404	.	0.0020	0.0309	.	0.0006	0.0100	0.0005
1	85X PSb5D	0.094	4.68	0.0023	0.180	0.0204	.	0.0013	0.0251	.	0.0017	0.0018	(0.0019)
1	85X PSb10B	0.090	10.0	0.0020	0.127	0.0410	.	0.0018	0.169	.	0.0027	0.0037	0.015
1	SRM C2416	0.09	0.79	0.0044	0.056	0.10	(0.001)	(0.0002)	0.065	(0.0005)	(0.0005)	(0.0005)	(0.0005)
1	82X PAG2.5RD	0.082	0.25	2.21	0.010	0.13	.	0.26	.	.	.	.	0.002
1	85X M2A	0.071	1.847	0.0016	0.259	0.0141	.	0.0003	0.0281	(0.0002)	0.0005	.	(0.0001)
1	85X 2.5LAA	0.068	2.48	0.0017	0.334	0.0142	.	(0.0002)	0.0372	.	0.0005	0.0004	0.0002
1	85X 0494 Pb1A	0.051	0.95	.	0.049	0.0017	.	.	0.012	.	.	.	.
1	85X SB28A	0.051	2.87	0.00248	0.162	0.0140	.	(0.0001)	0.0035	(0.00015)	0.0012	.	(0.0001)
1	84X BA4C	0.0480	0.0078	0.0020	(0.0027)	0.0260	0.0014	0.0092	0.0064	.	(0.0004)	0.0205	0.0065
1	85X N35A	0.044	3.42	0.0011	0.201	0.0130	.	0.00013	0.0246	(0.0001)	0.00058	.	0.00013
1	85X PSb8B	0.041	8.04	0.0049	0.0352	0.0178	.	0.0010	0.0169	.	0.0016	0.0043	<0.001
1	85X PSb5C	0.040	4.46	0.0026	0.135	0.0219	.	0.0009	0.0238	.	0.0013	0.0015	(0.0006)
1	82X PAG1.5RE	0.038	0.39	1.55	0.006	0.062	.	.	0.27	.	.	.	0.004
1	85X A16A	0.0356	1.57	0.0297	0.0503	0.0165	.	0.00014	0.0006	(0.0001)	0.0006	.	0.00011
1	85X SM31A	0.0274	2.98	0.0009	0.0581	0.0114	.	(0.0001)	0.0084	(0.0001)	0.0006	.	0.00015
1	85X SASHA	0.0130	1.54	0.0016	0.683	0.0602	.	0.00024	0.0245	.	0.0005	0.0006	.
1	85X CADLA	0.010	1.54	0.0076	0.0065	0.0169	.	1.69	0.0093	(0.0006)	(0.0005)	0.0030	(0.0018)
1	85X YUMA	0.0046	2.47	0.0018	0.306	0.0137	.	0.0002	0.0234	.	0.0007	0.0005	(0.0002)
1	85X 0616 Pb1C	0.0045	1.59	0.0071	0.060	0.0333	.	0.0016	0.0143	.			

LEAD ALLOYS

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* Provisional Analysis

Number	Al	Au	Hg	In	Mg	Mn	Na	Pd	S	Se	Tl	Units
91X S63PR4A	.	0.05	.	0.014	.	.	.	.	.	<0.005	.	Disc 40 mm Ø x 15 mm
91X S63PR3G	.	0.169	(0.038)	0.0097	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
91X S63PJ	(0.0003)	(0.0005)	.	0.0064	.	.	.	.	.	.	.	Disc -40 mm Ø x -15 mm
91X S63PR2J	(0.0014)	0.076	.	0.0154	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
91X S63B11A	(0.0015)	0.074	.	0.0067	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
91X S62AG2A	(0.0011)	0.0020	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
91X S63PR1G	.	0.0348	(0.015)	0.0308	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
91X S63PR0B	.	0.0148	0.004	0.0048	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
91X S50PR4B	(0.0006)	0.0355	.	0.0502	.	.	.	.	.	0.003	.	Disc -40 mm Ø x -15 mm
93X S50APR3A	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm last
93X S40APR3A	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm last
91X S40PR2D	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
SRM 1131	.	.	.	.	.	.	.	.	.	.	.	Disc 32 mm Ø x 19 mm
91X S40PR1B	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm last
93X S30APR3C	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
91X S30PR3C	.	0.0063	.	0.0085	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
93X S30APR2C	.	.	.	0.0199	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
91X S30PR2C	<0.0005	0.0017	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
93X S30APR1C	.	.	.	0.0094	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
86X PSS4B	.	.	.	0.0174	.	.	.	.	.	.	.	Disc -40 mm Ø x -15 mm
85X SSBKA	.	0.0079	.	0.209	.	.	.	.	(0.0008)	(0.0029)	0.0196	Disc 40 mm Ø x 15 mm
86X PSS3B	.	.	.	0.0111	.	.	.	.	.	.	.	Disc -40 mm Ø x -15 mm
91X S10PR1C	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
86X PSS2B	.	.	.	0.0059	.	.	.	0.0049	.	.	.	Disc 40 mm Ø x 15 mm
SRM 1132	.	.	.	.	.	.	.	.	.	.	.	Disc 32 mm Ø x 19 mm
86X PSS1B	.	.	.	0.0074	.	.	.	0.0023	.	.	.	Disc 40 mm Ø x 15 mm
84X BA9C	0.0207	.	.	.	.	.	.	.	.	.	.	Disc -40 mm Ø x -15 mm
85X SSCHA	.	.	.	.	.	.	.	.	0.0035	(0.015)	.	Disc 40 mm Ø x 15 mm
85X PSn2C	.	.	Co:0.0004	.	.	.	.	.	(0.0009)	0.0042	.	Disc -40 mm Ø x -15 mm
BAM EB106	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 40 mm
84X BA13A	0.0198	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x -15 mm
84X BA12F	0.0148	.	.	.	.	.	.	.	.	.	.	Disc -40 mm Ø x -15 mm
BAM EB105	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 40 mm
84X BA11A	0.0125	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x -15 mm
84X BA11B	0.0207	.	.	.	.	.	.	.	.	.	.	Disc -38 mm Ø x -15 mm
BAM EB104	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 40 mm
85X ANTHF	.	.	Co:0.0006	(<0.0002)	(<0.0001)	.	(0.0004)	.	0.0026	0.014	.	Disc -40 mm Ø x -15 mm
BAM EB102a	0.0124	.	.	.	.	.	.	.	(<0.0003)	.	0.00302	Disc 40 mm Ø x 40 mm
84X BA14A	0.0188	.	.	.	.	.	.	.	.	.	.	Disc -40 mm Ø x -15 mm
85X PSb5B	.	.	.	.	.	.	.	.	(0.0040)	0.0020	.	Disc -40 mm Ø x -15 mm
84X BA15A	0.0161	.	.	.	.	.	.	.	.	.	.	Disc -38 mm Ø x -15 mm
84X BA1K	0.0336	.	.	.	.	.	.	.	.	.	.	Disc -39 mm Ø x -15 mm
85X HRHH	.	.	.	.	.	.	.	.	(0.0022)	0.0375	.	Disc 40 mm Ø x 15 mm
83X PR8D	.	0.0106	0.086	0.293	.	.	.	.	.	(0.0003)	.	Disc -40 mm Ø x -15 mm
83X PR8C	.	0.0082	0.089	0.224	.	.	0.0073	.	.	0.0064	.	Disc 40 mm Ø x 15 mm
Number	Al	Au	Hg	In	Mg	Mn	Na	Pd	S	Se	Tl	Units
84X BA7B	0.0085	.	.	.	.	.	.	.	.	.	.	Disc -40 mm Ø x -15 mm
84X BA2D	0.0183	.	.	.	.	.	.	.	.	.	.	Disc -40 mm Ø x -15 mm
82X PAG6.0RA	<0.001	.	.	0.008	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
L21.04	.	.	.	.	.	.	.	.	.	.	last	Block 50 mm x 50 mm x 20 mm
85X MS2XA	.	.	.	.	.	.	.	.	(0.0002)	0.0334	.	Disc -38 mm Ø x -15 mm
84X BA20B	0.065	.	.	.	.	.	.	.	.	.	.	Disc -38 mm Ø x -15 mm
84X BA3C	0.0026	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
84X BA8D	0.0359	.	.	.	.	.	.	.	.	.	.	Disc -40 mm Ø x -15 mm
SRM C2415a	Pb:(96)	.	.	.	.	.	.	.	(0.0061)	0.01005	.	Disc 40 mm Ø x 18 mm
BAM EB101a	0.0227	.	.	.	(0.0009)	.	(0.0004)	.	(<0.0003)	.	0.00102	Disc 40 mm Ø x 40 mm
85X PSb5E	.	.	.	.	.	.	.	.	0.018	0.014	.	Disc -38 mm Ø x -15 mm
85X PSb12B	.	.	.	.	.	.	.	.	<0.001	0.0004	.	Disc 40 mm Ø x 15 mm
L21.02	.	.	.	.	.	.	.	.	.	.	.	Block 50 mm x 50 mm x 20 mm
82X PAG3.5RD	0.0015	.	.	0.037	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
85X 0494 Pb3C	.	.	.	.	.	.	.	.	0.007	0.036	.	Disc -40 mm Ø x -15 mm
84X BA23B	0.0569	.	.	.	.	.	.	.	.	.	.	Disc -40 mm Ø x -15 mm
83X PR7B	.	.	.	0.653	.	.	.	Pt:0.0047	.	0.0052	.	Disc 40 mm Ø x 15 mm
BAM EB103	.	.	.	.	.	.	.	.	.	0.0180	0.00152	Disc 40 mm Ø x 30 mm
84X BA21B	0.0125	.	.	.	.	.	.	.	.	.	.	Disc -39 mm Ø x -15 mm
83X PR9A	0.0138	0.200	.	Li:0.066	0.054	.	0.077	.	.	.	.	Disc -40 mm Ø x -15 mm
85X PSB3H	.	.	.	.	.	.	.	.	(0.0012)	0.0233	.	Disc -40 mm Ø x -15 mm
84X BA22B	0.074	.	.	.	.	.	.	.	.	.	.	Disc -38 mm Ø x -15 mm
L21.01	.	.	.	.	.	.	.	.	.	.	.	Block 50 mm x 50 mm x 20 mm
85X CADHB	.	.	.	.	.	<0.0005	.	.	<0.0005	0.0010	.	Disc 40 mm Ø x 15 mm
83X PR2G	.	0.0005	0.003	0.0010	.	.	0.0013	.	(0.0006)	0.0005	(0.0017)	Disc -40 mm Ø x -15 mm
85X PSb5D	.	.	.	.	.	.	.	.	0.0075	0.0024	.	Disc 40 mm Ø x 15 mm last
85X PSb10B	.	.	.	.	.	.	.	.	<0.001	0.0020	.	Disc 40 mm Ø x 15 mm
SRM C2416	(<0.0001)	.	.	.	.	(<0.0005)	.	.	0.0015	.	.	Disc 50 mm Ø x 16 mm
82X PAG2.5RD	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
85X M2A	.	.	.	.	.	.	.	.	(0.0008)	0.0247	.	Disc -38 mm Ø x -15 mm
85X 2.5LAA	.	.	.	.	.	.	.	.	.	0.0006	.	Disc -40 mm Ø x -15 mm
85X 0494 Pb1A	.	.	.	.	.	.	.	.	.	0.004	.	Disc 40 mm Ø x 15 mm
85X SB28A	.	.	.	.	.	.	.	.	0.0010	0.0223	.	Disc -38 mm Ø x -15 mm
84X BA4C	0.0015	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x -15 mm
85X N35A	.	.	.	.	.	.	.	.	0.007	0.0004	.	Disc -38 mm Ø x -15 mm
85X PSb8B	.	.	.	.	.	.	.	.	0.005	0.0022	.	Disc 40 mm Ø x 15 mm
85X PSb5C	.	.	.	.	.	.	.	.	0.030	0.0020	.	Disc 40 mm Ø x 15 mm
82X PAG1.5RE	.	.	.	.	.	.	.	.	.	.	.	Disc 40 mm Ø x 15 mm
85X A16A	.	.	.	.	.	.	.	.	(0.0003)	0.0218	.	Disc -38 mm Ø x -15 mm
85X SM31A	.	.	.	.	.	.	.	.	0.0003	0.0183	.	Disc -38 mm Ø x -15 mm
85X SASHA	.	.	.	.	.	.	.	.	(0.0005)	.	.	Disc 40 mm Ø x -15 mm
85X CADLA	.	.	.	.	.	.	.	.	.	(0.0011)	.	Disc 40 mm Ø x -15 mm
85X YUMA	.	.	.	.	.	.	.	.	0.0062	0.0008	.	Disc -40 mm Ø x -15 mm
85X 0616 Pb1C	.	.	0.0010	.	.	.	.	.	.	0.0087	.	Disc -40 mm Ø x -15 mm
Number	Al	Au	Hg	In	Mg	Mn	Na	Pd	S	Se	Tl	Units

MAGNESIUM

= class, where 1 = CRM and 2 = RM

61X: not for Glow Discharge

#	Number	Al	Cu	Fe	Mn	Ni	Pb	Si	Zn	Ag	Be
1	58A ST4360	(1.06)	0.025	0.02	0.148	0.0052	0.018	0.02	0.025	.	.
1	58A ST4320	(0.531)	0.0077	0.027	0.085	0.011	0.037	0.062	0.047	.	.
1	NCS HS49725-2	(0.531)	0.0077	0.027	0.085	0.011	0.037	0.062	0.047	.	.
1	58A ST4340	0.262	0.014	0.0069	0.023	0.0044	0.012	0.034	0.019	.	.
1	NCS HS49725-4	0.262	0.014	0.0069	0.023	0.0044	0.012	0.034	0.019	.	.
1	61X MgP3A	0.096	0.0296	0.014	0.0135	0.0049	0.0148	0.046	0.0196	0.0125	<0.0001
1	63X MgE1E	(0.088)	0.0503	0.0014	0.860	0.0162	0.011	0.052	0.083	0.0195	(0.0002)
1	61X MgP2A	0.065	0.0109	0.0061	0.0118	0.0029	0.0061	0.031	0.0122	0.003	<0.0001
2	58A ZH1120	0.063	0.037	0.012	0.062	0.012	0.0073	0.037	0.038	.	.
2	58A ZH1130	0.055	0.017	0.015	0.039	0.007	0.0035	0.055	0.02	.	.
1	61X MgP4A	0.0247	0.0108	(0.0044)	0.0100	0.0028	0.0066	0.037	0.0158	0.0203	<0.0001
1	58A ST4330	0.017	0.0087	0.0083	0.019	0.0021	0.0067	0.023	0.012	.	.
1	NCS HS49725-3	0.017	0.0087	0.0083	0.019	0.0021	0.0067	0.023	0.012	.	.
2	58A ZH1140	0.017	0.0054	0.0044	0.011	0.0007	0.0013	0.0027	0.0058	.	.
2	58A ZH1160	0.011	0.0016	0.0071	0.016	0.0004	0.0025	0.019	0.004	.	.
1	NCS HS49725-1	0.011	0.0012	0.0028	0.017	0.00035	0.0052	0.011	0.011	.	.
1	58A ST4370	0.0082	0.0039	0.0055	0.017	0.0013	0.0067	0.03	0.013	.	.
1	NCS HS49725-7	0.0082	0.0039	0.0055	0.017	0.0013	0.0067	0.030	0.013	.	.
2	58A ZH1150	0.0062	0.0003	0.0015	0.0054	(0.0001)	(0.0005)	0.0024	0.0046	.	.
1	58A ST4350	0.0059	0.00063	0.0022	0.006	(0.00033)	0.002	0.0063	0.0079	.	.
1	NCS HS49725-5	0.0059	0.00063	0.0022	0.0060	(0.00033)	0.0020	0.0063	0.0079	.	.
2	58A ZH1110	0.0052	0.062	0.0054	0.092	0.0041	0.012	0.015	0.058	.	.
1	58A ST4310b	0.005	0.00097	0.0087	0.022	0.00026	(0.0011)	0.012	0.0012	.	.

Number	Ca	Cd	Ce	Cl	La	Na	Sn	Ti	Zr	~mm Ø x ~mm H
58A ST4360	.	.	.	.	.	.	.	0.0025	.	45 x 25
58A ST4320	.	.	.	.	.	.	.	(0.00018)	.	45 x 25
NCS HS49725-2	.	.	.	.	.	.	.	(0.00018)	.	45 x 25
58A ST4340	.	.	.	.	.	.	.	0.0012	.	45 x 25
NCS HS49725-4	.	.	.	.	.	.	.	0.0012	.	45 x 25
61X MgP3A	0.053	0.0154	0.0055	.	0.0038	.	0.0154	.	(0.0014)	40 x 15
63X MgE1E	.	0.0017	.	.	.	.	0.0053	.	.	50x20 or 40x15
61X MgP2A	0.0138	0.0063	0.0019	.	0.0014	.	0.0073	.	(0.0007)	40 x 15
58A ZH1120	.	.	.	(0.0023)	.	(0.0002)	.	.	.	~49 x ~34
58A ZH1130	.	.	.	(0.0027)	.	(0.0003)	.	.	.	~49 x ~34
61X MgP4A	0.028	0.0071	0.0041	.	0.0030	.	0.0067	.	0.030	40 x 15
58A ST4330	.	.	.	.	.	.	.	(0.0008)	.	45 x 25
NCS HS49725-3	.	.	.	.	.	.	.	0.000062	.	45 x 25
58A ZH1140	.	.	.	(0.0015)	.	(0.0003)	.	.	.	~49 x ~34
58A ZH1160	.	.	.	(0.0018)	.	(0.0001)	.	.	.	~49 x ~34
NCS HS49725-1	.	.	.	.	.	.	.	0.00027	.	45 x 25
58A ST4370	.	.	.	.	.	.	.	(0.00010)	.	45 x 25
NCS HS49725-7	.	.	.	.	.	.	.	(0.00010)	.	45 x 25
58A ZH1150	.	.	.	(0.0011)	.	(0.0001)	.	.	.	~49 x ~34
58A ST4350	.	.	.	.	.	.	.	.	.	45 x 25
NCS HS49725-5	.	.	.	.	.	.	.	0.000072	.	45 x 25
58A ZH1110	.	.	.	(0.0018)	.	(0.0004)	.	.	.	~49 x ~34
58A ST4310b	.	.	.	.	.	.	.	0.00026	.	45 x 25

MAGNESIUM with RARE EARTHS

= class, where 1 = CRM and 2 = RM analysis listed in mass % except * which is mg/kg

#	Number	Ag	Al	Be*	Ca	Cd*	Ce	Cu	Fe	Gd	La	Mn	Nd	Ni
1	67X MgK3A	.	4.56	7	.	.	0.83	0.0017	0.0024	0.038	0.374	0.516	0.175	0.0016
1	67X MgK2A	.	3.84	25	.	.	0.70	0.0041	0.0016	0.053	0.34	0.534	0.125	0.0033
1	64X MgQ9A	.	2.14	15	.	.	0.111	0.0104	0.0069	.	0.083	0.068	0.114	0.0020
1	66X MgD1B	.	0.147	.	.	.	0.065	0.0066	0.0029	.	0.031	0.125	0.064	0.0162
1	61X MgP5A	0.0342	0.119	18	.	292	0.049	0.092	0.0048	.	0.0382	0.201	0.0446	0.0176
1	61X MgP6A	0.0043	0.0449	.	(0.0008)	25	0.0209	0.0067	0.0041	.	0.0137	0.0125	0.0238	0.0025
2	66X MgD3B ##	0.005	0.041	3	(0.07)	.	0.004	0.058	0.023	.	0.004	0.28	.	0.002
2	AA C7548	.	0.004	.	.	.	2.66	0.022	.	.	.	0.035	.	0.001
2	AA C7594	.	0.003	.	.	.	3.22	0.080	.	.	.	0.033	.	0.001
2	AA C7546	.	0.003	.	.	.	1.63	0.058	.	.	.	0.039	.	0.004
2	AA C7514	.	0.002	.	.	.	2.47	0.12	.	.	.	0.012	.	0.002
2	AA C7489	.	0.001	.	.	.	2.57	0.004	.	.	.	0.012	.	0.015
2	AA E1273	.	0	.	.	.	1.86	0.022	.	.	.	0.041	.	0.002
2	AA E1272	.	0	.	.	.	1.79	0.026	.	.	.	0.045	.	0.003
1	58A ST5280	.	.	.	.	.	4.16	.	.	.	.	.	.	.
1	58A ST5290	.	.	.	.	.	3.37	.	.	.	.	.	.	.
1	58A ST5260	.	.	.	.	.	2.79	.	.	.	.	.	.	.
1	58A ST5250	.	.	.	.	.	1.54	0.133	.	.	.	0.214	.	0.005
1	58A ST5240	.	.	.	.	.	1.47	0.051	.	.	.	0.062	.	0.084
1	58A ST5230	.	.	.	.	.	1.28	0.068	0.0041	.	.	0.067	.	0.0011
1	58A ST5220	.	.	.	.	.	0.826	0.054	0.0033	.	.	0.093	.	0.0009
1	58A ST5210	.	.	.	.	.	0.149	0.0092	0.0027	.	.	0.15	.	0.001
1	58A ST10350	.	.	.	.	.	.	.	.	.	.	.	3.55	.
1	58A ST10360	.	.	.	.	.	.	.	.	.	.	.	3.38	.
1	58A ST10340	.	.	.	.	.	.	.	.	.	.	.	2.6	.
1	58A ST10330	.	.	.	.	.	.	.	.	.	.	.	2.28	.
1	58A ST10320	.	.	.	.	.	.	.	.	.	.	.	0.71	.
1	58A ST10310	.	.	.	.	.	.	.	.	.	.	.	0.429	.
2	AA D1075	.	.	.	.	.	.	.	.	.	.	.	.	.
2	AA D1073	.	.	.	.	.	.	.	.	.	.	.	.	.
2	AA D1072	.	.	.	.	.	.	.	.	.	.	.	.	.
2	AA D1074	.	.	.	.	.	.	.	.	.	.	.	.	.
1	58A ST9460	.	.	.	.	.	.	.	.	.	.	.	.	.
1	58A ST9450	.	.	.	.	.	.	.	.	.	.	.	.	.
1	58A ST9440	.	.	.	.	.	.	.	.	.	.	.	.	.
1	58A ST9430	.	.	.	.	.	.	.	.	.	.	.	.	.
1	58A ST9420	.	.	.	.	.	.	.	.	.	.	.	.	.
1	58A ST9410	.	.	.	.	.	.	.	.	.	.	.	.	.

#	Number	Ag	Al	Be*	Ca	Cd*	Ce	Cu	Fe	Gd	La	Mn	Nd	Ni
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Number	Pb	Pr	R.E.	Si	Sn	Y	Zn	Zr	-mm Ø x -mm H
67X MgK3A	.	0.069	.	0.068	.	.	0.050	.	50x20 or 40x15
67X MgK2A	.	0.053	.	0.057	.	.	0.132	.	50x20 or 40x15
64X MgQ9A	0.0096	.	.	(0.37)	0.0076	.	0.243	.	40 x 15
66X MgD1B	0.026	.	.	(0.073)	0.026	.	1.19	.	40 x 15
61X MgP5A	0.0357	.	.	(0.094)	0.0352	0.0132	0.099	.	40 x 15
61X MgP6A	0.0120	.	.	0.044	0.0091	0.0375	0.010	.	50x20 or 40x15
66X MgD3B ##	0.009	.	.	0.020	0.007	.	1.97	0.029	40 x 15
AA C7548	.	.	(4.8)	0.002	.	.	.	0.16	62 x 6
AA C7594	.	.	(6.0)	0.002	.	.	.	0.31	62 x 6
AA C7546	.	.	(3.0)	0.001	.	.	.	0.34	62 x 6
AA C7514	.	.	(4.7)	0.002	.	.	.	0.42	62 x 6
AA C7489	.	.	(5.0)	0.002	.	.	.	0.46	62 x 6
AA E1273	.	.	(3.6)	0.0	.	.	2.87	0.54	62 x 6
AA E1272	.	.	(3.3)	0.0	.	.	2.58	0.54	62 x 6
58A ST5280	.	.	.	.	.	.	3.52	0.63	45 x 25
58A ST5290	.	.	.	.	.	.	4.37	0.81	45 x 25
58A ST5260	.	.	.	.	.	.	4.36	(1.03)	45 x 25
58A ST5250	.	.	.	.	.	.	1.46	.	45 x 25
58A ST5240	.	.	.	.	.	.	2.69	.	45 x 25
58A ST5230	.	.	.	(0.0047)	.	.	3.63	.	45 x 25
58A ST5220	.	.	.	(0.0056)	.	.	4.58	.	45 x 25
58A ST5210	.	.	.	.	.	.	5.59	.	45 x 25
58A ST10350	.	.	.	.	.	.	.	.	45 x 25
58A ST10360	.	.	.	.	.	.	.	.	45 x 25
58A ST10340	.	.	.	.	.	.	.	.	45 x 25
58A ST10330	.	.	.	.	.	.	.	.	45 x 25
58A ST10320	.	.	.	.	.	.	.	.	45 x 25
58A ST10310	.	.	.	.	.	.	.	.	45 x 25
AA D1075	.	.	(3.7)	.	AA	.	(2.7)	0.64	62 x 6
AA D1073	.	.	(3.7)	.	.	.	3.23	(0.6)	62 x 6
AA D1072	.	.	(3.4)	.	.	.	2.02	(0.5)	62 x 6
AA D1074	.	.	(3.4)	.	.	.	(2.7)	0.42	62 x 6
58A ST9460	.	.	.	.	.	6.69	.	.	45 x 25
58A ST9450	.	.	.	.	.	4.3	.	.	45 x 25
58A ST9440	.	.	.	.	.	3.52	.	.	45 x 25
58A ST9430	.	.	.	.	.	2.02	.	.	45 x 25
58A ST9420	.	.	.	.	.	1.78	.	.	45 x 25
58A ST9410	.	.	.	.	.	0.527	.	.	45 x 25

Number	Pb	Pr	R.E.	Si	Sn	Y	Zn	Zr	-mm Ø x -mm H
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MAGNESIUM with ALUMINUM

#	Number	Al	Be	Ca	Cd	Cu	Fe	Mn	Ni	Pb	Si	Sn	Zn
1	58A ST2150	11.52	(0.0023)	.	.	0.295	(0.020)	(0.68)	0.018	.	0.176	.	0.217
1	65X MgA15A	10.67	0.0062	(0.0014)	.	0.0273	0.010	0.067	0.0026	0.0051	0.034	0.0021	0.348
2	58A ZH2050M	10.4	0.0007	.	.	0.307	0.0081	(0.71)	0.019	.	0.41	.	0.201
2	AA D3738	10.38	.	.	.	0.031	.	0.21	0.004	.	0.085	.	0.32
1	64X MgQ3A	8.66	0.0041	.	.	0.0349	0.0090	0.206	0.0032	0.0022	(0.083)	0.0019	0.0039
1	65X MgA5A	8.00	0.0013	(0.014)	0.0035	0.0195	0.006	0.401	0.0201	0.042	0.110	0.0124	0.411
1	58A ST1240	7.33	0.00015	.	.	0.02	0.015	0.182	(0.0015)	.	0.27	.	0.171
1	64X MgQ4A	6.50	0.00029	.	.	0.310	0.0040	0.183	0.0068	0.0322	(0.067)	0.0282	0.188
1	58A ST1250	6.29	(0.0010)	.	.	0.02	(0.016)	0.428	(0.0068)	.	0.286	.	0.271
1	58A ST1210	6.1	(0.0020)	.	.	0.0029	(0.039)	0.92	0.0012	.	0.034	.	0.056
1	58A ST2000a	5.96	(0.00024)	.	.	0.0035	0.007	0.02	0.00094	.	0.097	.	0.0068
1	58A ST3320	5.82	0.00018	.	.	0.0016	0.0077	0.095	0.0012	.	1.54	.	0.128
1	NCS HS49724-2	5.82	0.00018	.	.	0.0016	0.0077	0.095	0.0012	.	1.54	.	0.128
1	64X MgQ5A	5.76	0.0013	.	.	0.0072	0.0043	0.276	0.0010	0.0056	0.052	0.0050	0.047
1	58A ST1260	4.56	0.0009	.	.	0.013	0.025	(0.65)	0.0025	.	0.241	.	0.106
1	64X MgQ2A	4.53	0.0013	.	.	0.0151	0.0041	0.378	0.0061	0.0107	0.051	0.0107	0.107
1	58A ST3340	4.37	0.0009	.	.	0.103	0.022	0.33	0.0038	.	1.22	.	0.25
1	NCS HS49724-4	4.37	0.0009	.	.	0.103	0.022	0.33	0.0038	.	1.22	.	0.25
1	65X MgA17A	4.20	.	0.021	0.0049	0.0215	0.0069	0.203	0.0141	0.009	0.33	0.0050	0.128
1	64X MgQ7A	4.02	0.00042	.	.	0.0167	0.0028	(0.434)	0.0053	0.0126	(1.05)	0.0096	0.0607
1	65X MgB4C	3.86	0.0033	0.0010	0.00016	0.0183	(0.009)	0.031	0.0003	0.0037	0.037	0.0050	0.333
1	58A ST3310	3.69	0.00011	.	.	0.0084	0.007	0.59	0.0012	.	0.54	.	0.102
1	NCS HS49724-1	3.69	0.00011	.	.	0.0084	0.0070	0.59	0.0012	.	0.54	.	0.102
1	58A ST3350	2.58	0.0012	.	.	0.039	0.033	0.23	0.014	.	1.83	.	0.152
1	NCS HS49724-5	2.58	0.0012	.	.	0.039	0.033	0.23	0.014	.	1.83	.	0.152
1	58A ST1220	2.55	0.0009	.	.	0.0081	0.0089	0.338	0.0008	.	0.173	.	0.237
2	AA C8209	2.55	.	.	.	0.012	(0.02)	0.15	0.001	.	0.058	.	0.18
1	64X MgQ6A	2.31	0.0007	.	.	0.0045	(0.004)	(0.260)	0.0026	0.0060	(0.97)	0.0055	0.072
2	AA C8211	2.07	.	.	.	0.033	(0.02)	0.20	0.007	.	0.090	.	0.23
1	58A ST3330	1.09	(0.0005)	.	.	0.016	(0.0034)	(0.50)	(0.0013)	.	0.68	.	0.339
1	NCS HS49724-3	1.09	(0.0005)	.	.	0.16	(0.0034)	(0.50)	(0.0013)	.	0.68	.	0.339
1	64X MgQ1A	1.083	0.00036	.	.	0.084	0.0034	0.377	0.0041	0.020	0.062	0.0195	0.235
1	NCS HS49725-6	(1.06)	.	.	.	0.025	0.020	0.148	0.0052	0.018	0.020	.	0.025
1	64X MgQ8A	1.03	0.00015	.	.	0.0019	0.0018	0.700	0.0004	0.0008	0.045	0.0022	0.044
#	Number	Al	Be	Ca	Cd	Cu	Fe	Mn	Ni	Pb	Si	Sn	Zn

Number	Ag	Ce	Hg	La	Sr	Ti	Zr	~mm	Ø x	~mm	H
58A ST2150	.	.	.	.	.	.	.	45	x	25	
65X MgA15A	0.030	0.0069	0.011	0.0048	.	.	.	50x20	or	40x15	
58A ZH2050M	.	.	.	.	.	.	.	~49	x	~34	
AA D3738	.	.	.	.	.	.	.	62	x	6	
64X MgQ3A	.	.	.	.	.	.	.	50x20	or	40x15	
65X MgA5A	0.0050	.	.	.	0.0004	(0.001)	.	50x20	or	40x15	
58A ST1240	.	.	.	.	.	.	.	45	x	25	
64X MgQ4A	.	.	.	.	.	.	.	50x20	or	40x15	
58A ST1250	.	.	.	.	.	.	.	45	x	25	
58A ST1210	.	.	.	.	.	.	.	45	x	25	
58A ST2000a	.	.	.	.	.	.	.	45	x	25	
58A ST3320	.	.	.	.	.	.	.	45	x	25	
NCS HS49724-2	.	.	.	.	.	.	.	45	x	25	
64X MgQ5A	.	.	.	.	.	.	.	50x20	or	40x15	
58A ST1260	.	.	.	.	.	.	.	45	x	25	
64X MgQ2A	.	.	.	.	.	.	.	50x20	or	40x15	
58A ST3340	.	.	.	.	.	.	.	45	x	25	
NCS HS49724-4	.	.	.	.	.	.	.	45	x	25	
65X MgA17A	0.0064	.	.	.	.	.	.	50x20	or	40x15	
64X MgQ7A	.	.	.	.	.	.	.	50x20	or	40x15	
65X MgB4C	0.0046	0.0003	.	(0.0001)	.	(0.0008)	<0.001	40	x	18	
58A ST3310	.	.	.	.	.	.	.	45	x	25	
NCS HS49724-1	.	.	.	.	.	.	.	45	x	25	
58A ST3350	.	.	.	.	.	.	.	45	x	25	
NCS HS49724-5	.	.	.	.	.	.	.	45	x	25	
58A ST1220	.	.	.	.	.	.	.	45	x	25	
AA C8209	.	.	.	.	.	.	.	62	x	6	
64X MgQ6A	.	.	.	.	.	.	.	50x20	or	40x15	
AA C8211	.	.	.	.	.	.	.	62	x	6	
58A ST3330	.	.	.	.	.	.	.	45	x	25	
NCS HS49724-3	.	.	.	.	.	.	.	45	x	25	
64X MgQ1A	.	.	.	.	.	.	.	50x20	or	40x15	
NCS HS49725-6	.	.	.	.	.	0.0025	.	45	x	25	
64X MgQ8A	.	.	.	.	.	.	.	50x20	or	40x15	
Number	Ag	Ce	Hg	La	Sr	Ti	Zr	~mm	Ø x	~mm	H

MAGNESIUM with ALUMINUM and ZINC

= class, where 1 = CRM and 2 = RM ##: not for Glow Discharge

#	Number	Al	Zn	Be	Ca	Cd	Cu	Fe	Mn	Ni	Pb	Si	Sn
1	65X MgA21A	12.37	5.11	0.0006	.	.	0.0020	0.0140	0.0777	0.0010	0.0048	0.028	0.0063
1	65X MgA23A	9.72	0.543	0.0026	.	.	0.0153	0.0083	0.130	0.0011	0.0020	0.0270	0.0026
1	58A ST2160	9.07	0.98	0.0029	.	.	0.0098	0.039	0.61	0.0036	.	0.43	.
2	58A ZH2040M	9.0	0.46	0.0013	.	.	0.222	0.01	0.57	0.015	.	0.285	.
1	65X MgA19A	8.97	2.17	0.00025	.	.	0.0426	0.0085	0.322	0.0065	0.049	0.196	0.049
1	65X MgA22A	8.60	0.882	0.0005	.	.	0.0783	0.0054	0.40	0.0057	0.0039	(0.086)	0.0032
2	AA SM183-B	(8.0)	(3.0)	.	.	.	.	.	(0.2)	0.005	.	.	.
2	AA SM183-C	(8.0)	(3.0)	.	.	.	.	.	(0.2)	0.005	.	.	.
2	AA SM183-D	(8.0)	(3.0)	.	.	.	.	.	(0.2)	0.005	.	.	.
2	AA C3731D	7.66	2.62	.	.	.	0.011	.	0.12	0.012	.	0.093	.
2	AA C3731G	7.54	2.60	.	.	.	0.011	.	0.12	0.012	.	0.091	.
1	65X MgA13A	7.45	0.925	(0.010)	0.0064	0.0055	0.125	(0.008)	0.092	0.0039	0.0085	0.022	0.043
1	58A ST2120	7.18	2.99	0.00044	.	.	0.087	0.013	0.339	0.0045	.	0.097	.
2	58A ZH2030M	6.97	0.71	0.0017	.	.	0.151	0.018	0.374	0.0096	.	0.183	.
1	58A ST2130	6.96	1.94	0.001	.	.	0.164	0.023	0.231	(0.013)	.	0.28	.
1	65X MgA16A	6.78	4.03	0.0011	0.0024	0.0066	0.099	0.0073	0.271	0.0057	0.050	0.023	0.028
1	65X MgA18A	6.75	0.502	0.00051	.	.	0.052	0.0081	0.192	0.0074	0.0244	0.043	0.0114
2	AA SM145	(6.7)	(2.4)	0.003	.	.	.	.	.	.	.	.	.
2	AA C3681D	5.99	3.32	.	.	.	0.19	.	0.16	.	.	0.47	.
1	65X MgA20A	5.87	1.32	0.0018	.	.	0.013	0.008	0.067	0.0025	0.0075	0.052	0.032
1	65X MgA12A	5.68	3.18	(0.0036)	0.037	0.0121	0.266	0.0053	0.198	0.0148	0.010	0.0142	0.0021
1	65X MgA1J ##	5.45	1.26	0.006	0.029	0.013	0.221	0.021	0.060	0.021	0.012	0.20	0.072
2	58A ZH2020M	5.06	0.95	0.0022	.	.	0.085	0.028	0.256	0.0047	.	0.10	.
1	58A ST2110a	4.45	4.1	(0.00015)	.	.	0.00072	0.0029	0.077	0.00042	.	0.019	.
1	65X MgA11A	3.63	1.59	0.0021	0.102	0.0014	0.0496	0.0048	0.044	0.0134	0.0190	0.022	0.093
1	65X MgB3C	3.38	0.711	0.0019	(0.0033)	0.0025	0.022	0.0028	0.277	0.0027	0.0023	0.042	0.0017
2	AA C7574	3.36	(1.0)	.	.	.	.	.	(0.4)	.	.	.	.
1	65X MgB3B ##	3.19	0.608	0.0029	0.030	0.012	0.0214	(0.004)	0.0122	0.0020	0.0037	0.012	0.0050
2	58A ZH2010M	3.04	1.21	0.0032	.	.	0.0096	0.035	0.082	0.0006	.	0.037	.
2	AA C7640	(3.0)	0.76	.	.	.	.	.	(0.4)	.	.	.	.
2	AA C7641	(3.0)	1.36	.	.	.	.	.	.	.	.	.	.
2	AA C7643	(3.0)	(1.0)	.	.	.	0.026	.	0.32	0.005	.	0.14	.
1	65X MgB2D	2.81	1.047	0.0014	(0.010)	0.0103	0.065	0.0032	0.526	0.0043	0.0053	(0.088)	0.0052
1	65X MgB2C	2.67	0.95	0.0008	0.011	0.0114	0.113	(0.010)	0.333	0.0027	0.0036	0.069	0.0047
2	AA C7639	2.39	(1.0)	.	.	.	.	.	(0.4)	.	.	.	.
1	65X MgB1E	1.90	1.60	0.0008	(0.067)	0.076	0.051	0.0027	0.770	0.0020	0.0095	0.069	0.0098
1	58A ST1270	1.36	0.492	0.0033	.	.	0.01	0.0049	0.13	0.01	.	0.065	.

#	Number	Al	Zn	Be	Ca	Cd	Cu	Fe	Mn	Ni	Pb	Si	Sn
Number	Ag	Ce	Hg	La	Ti	Zr	~mm Ø x ~mm H						
65X MgA21A	.	.	.	.	.	.	50x20 or 40x15						
65X MgA23A	.	.	.	.	.	.	50x20 or 40x15						
58A ST2160	.	.	.	.	.	.	45 x 25						
58A ZH2040M	.	.	.	.	.	.	~49 x ~34						
65X MgA19A	.	.	.	.	.	.	50x20 or 40x15						
65X MgA22A	.	.	.	.	.	.	50x20 or 40x15						
AA SM183-B	.	.	.	.	.	.	62 x 6						
AA SM183-C	.	.	.	.	.	.	62 x 6						
AA SM183-D	.	.	.	.	.	.	62 x 6						
AA C3731D	.	.	.	.	.	.	62 x 6						
AA C3731G	.	.	.	.	.	.	62 x 6						
65X MgA13A	0.0074	0.0024	(0.033)	0.0021	.	.	50x20 or 40x15						
58A ST2120	.	.	.	.	.	.	45 x 25						
58A ZH2030M	.	.	.	.	.	.	~49 x ~34						
58A ST2130	.	.	.	.	.	.	45 x 25						
65X MgA16A	0.0035	0.0017	0.005	0.0012	.	.	50x20 or 40x15						
65X MgA18A	.	.	.	.	.	.	50x20 or 40x15						
AA SM145	.	.	.	.	.	.	62 x 6						
AA C3681D	.	.	.	.	.	.	62 x 6						
65X MgA20A	.	.	.	.	.	.	50x20 or 40x15						
65X MgA12A	0.0128	0.0009	(0.016)	0.0007	.	.	50x20 or 40x15						
65X MgA1J ##	0.012	0.009	.	0.007	(0.005)	(0.0015)	45 x 20						
58A ZH2020M	.	.	.	.	.	.	~49 x ~34						
58A ST2110a	.	.	.	.	.	.	45 x 25						
65X MgA11A	(0.0002)	(0.0005)	0.006	(0.0005)	.	.	50x20 or 40x15						
65X MgB3C	0.0028	.	.	.	.	.	50x20 or 40x15						
AA C7574	.	.	.	.	.	.	62 x 6						
65X MgB3B ##	(0.024)	.	.	.	.	<0.001	45 x 20 last						
58A ZH2010M	.	.	.	.	.	.	~49 x ~34						
AA C7640	.	.	.	.	.	.	62 x 6						
AA C7641	.	.	.	.	.	.	62 x 6						
AA C7643	.	.	.	.	.	.	62 x 6						
65X MgB2D	0.0099	.	.	.	.	.	50x20 or 40x15						
65X MgB2C	0.0098	0.0009	.	0.0007	0.0003	<0.001	40 x 15						
AA C7639	.	.	.	.	.	.	62 x 6						
65X MgB1E	0.0300	.	.	.	.	.	50x20 or 40x15						
58A ST1270	.	.	.	.	.	.	45 x 25						

Number	Ag	Ce	Hg	La	Ti	Zr	~mm Ø x ~mm H
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MAGNESIUM with MANGANESE

= class, where 1 = CRM and 2 = RM

#	Number	Mn	Al	Cu	Fe	Ni	Pb	Si	Sn	Zn
1	63X MgE3B	2.36	0.015	0.012	0.004	0.0023	0.005	(0.009)	0.0055	0.022
2	AA C8096	1.88	(0.1)	(0.04)	.	(0.003)	.	(0.05)	.	(0.1)
1	63X MgE2B	1.76	0.045	0.0203	0.0019	0.0035	0.0020	0.019	0.0026	0.0243
2	AA SMD3A	1.69	0.08	0.032	.	0.002	.	0.034	.	0.058
2	AA C8095	(1.6)	0.17	0.012	.	0.005	.	0.052	.	0.029
2	AA C8016	(1.3)	0.03	0.070	.	0.011	.	0.064	.	0.11
2	AA C7857	1.07	(0.1)	(0.03)	.	(0.001)	.	(0.05)	.	(0.1)

Number	Ag	Ca	Cd	Ti	Zr	~mm Ø x ~mm H
63X MgE3B	0.0048	0.13	0.0009	<0.001	<0.001	50x20 or 40x15
AA C8096	.	.	.	.	.	62 x 6
63X MgE2B	0.0089	(0.0016)	0.0009	.	.	40 x 15
AA SMD3A	.	.	.	.	.	62 x 6
AA C8095	.	.	.	.	.	62 x 6
AA C8016	.	.	.	.	.	62 x 6
AA C7857	.	.	.	.	.	62 x 6

CRM MAGNESIUM with STRONTIUM

Class	Number	Sr	Units
CRM	58A ST8240	0.028	45 mm Ø x 25 mm
CRM	58A ST8220	0.015	45 mm Ø x 25 mm
CRM	58A ST8230	0.0066	45 mm Ø x 25 mm
CRM	58A ST8210	0.0014	45 mm Ø x 25 mm

MAGNESIUM with ZINC

= class, where 1 = CRM and 2 = RM

#	Number	Zn	Ag	Al	Be	Ca	Cu	Fe	Mn	Ni	Pb	Si	Sn	Sr	Zr	~mm Ø x ~mm H
1	58A ST5310	7.02	.	.	.	.	.	0.011	.	.	.	0.025	.	.	.	45 x 25
1	66X MgC4C	6.81	0.0074	0.039	(0.0001)	(<0.001)	0.0024	0.006	0.166	0.0009	0.0030	0.06	0.021	(0.00014)	<0.001	50x20 or 40x15
1	58A ST7320	6.68	.	(0.036)	.	.	3.45	0.0069	0.361	0.00024	.	0.066	.	.	.	45 x 25
1	66X MgC5A	6.61	.	0.072	.	.	0.0286	0.0008	1.17	0.0111	0.0281	0.026	0.0051	.	.	50x20 or 40x15
1	66X MgD5A	6.25	0.044	0.040	<0.0005	(0.030)	2.88	0.008	0.307	0.0120	0.097	0.134	0.104	.	.	50x20 or 40x15
1	58A ST5120	6.15	.	.	.	.	.	.	.	.	.	0.0015	.	.	0.2	45 x 25
1	58A ST5130	6.08	.	.	.	.	.	.	.	0.025	.	.	.	.	0.36	45 x 25
1	58A ST7330	6.01	.	0.205	.	.	2.76	0.019	0.57	0.055	.	0.144	.	.	.	45 x 25
1	58A ST7340	5.52	.	0.148	.	.	3.71	(0.019)	0.25	0.018	.	0.332	.	.	.	45 x 25
1	58A ST7350	4.76	.	0.106	.	.	4.17	0.016	0.133	0.0022	.	0.215	.	.	.	45 x 25
1	58A ST5110	4.71	.	.	.	.	.	.	.	.	.	.	.	.	0.17	45 x 25
2	AA C7510	3.04	.	.	0.11	.	0.019	.	.	0.001	.	.	.	.	.	62 x 6
2	AA SM176	(3.0)	.	0.19	.	.	(0.03)	.	(0.2)	.	.	(0.1)	.	.	.	62 x 6
2	AA SM175	(2.0)	.	0.21	.	.	(0.03)	.	(0.2)	.	.	(0.1)	.	.	.	62 x 6

RM JEWELRY INDIVIDUAL XRF SAMPLES

analysis listed in mass % FLX 0740: 2mm Ø mounted in 36mm Ø x 10mm others: 3mm Ø mounted in 36mm Ø x 10mm

Number	Ag	Au	Cu	Fe	Ir	Ni	Pd	Pt	Rh	Ru	W	Zn
FLX 0720	.	99.99	0.002	.	0.002	.	0.002	0.002	0.002	.	.	.
FLX 1404	.	99.69	.	.	.	.	.	.	.	.	.	.
FLX 0701	4.59	91.76	3.65	.	.	.	.	.	.	.	.	Co: 0.310
FLX 0702	4.60	90.12	5.28	.	.	.	.	.	.	.	.	.
FLX 1405	.	81.89	.	.	.	18.11	.	.	.	.	.	.
FLX 0743	.	80.07	1.12	.	.	14.35	.	.	.	.	.	4.46
FLX 1402	5.16	76.37	10.29	.	.	.	.	.	.	.	.	8.18
FLX 0703	4.18	75.14	4.93	.	.	.	15.75	.	.	.	.	.
FLX 0708	.	75.12	17.47	.	.	5.81	.	.	.	.	.	1.60
FLX 0726	10.16	75.11	14.73	.	.	.	.	.	.	.	.	.
FLX 0728	4.79	75.1	20.11	.	.	.	.	.	.	.	.	.
FLX 0727	8.98	75.07	15.95	.	.	.	.	.	.	.	.	.
FLX 0724	15.07	75.05	9.88	.	.	.	.	.	.	.	.	.
FLX 0725	12.54	75.03	12.43	.	.	.	.	.	.	.	.	.
FLX 0705	10.09	75.03	4.83	.	.	.	10.05	.	.	.	.	.
FLX 0704	2.75	75.03	9.74	.	.	.	12.48	.	.	.	.	.
FLX 0707	2.75	75.02	15.13	.	.	5.04	.	.	.	.	.	2.06
FLX 0706	13.13	75.0	5.42	.	.	.	6.45	.	.	.	.	.
FLX 1302	15.16	59.13	17.31	.	.	.	.	.	.	.	.	8.40
FLX 0710	30.94	59.06	3.48	.	.	.	6.52	.	.	.	.	.
FLX 0709	21.93	59.02	4.05	.	.	.	15.0	.	.	.	.	.
FLX 0903	4.32	58.69	36.99	.	.	.	.	.	.	.	.	.
FLX 0738	19.7	58.65	19.22	.	.	.	.	.	.	.	.	2.43
FLX 0904	13.77	58.65	27.58	.	.	.	.	.	.	.	.	.
FLX 0905	25.06	58.64	14.92	.	.	.	.	.	.	.	.	1.38
FLX 0715	.	58.64	26.18	.	.	6.09	.	.	.	.	.	9.09
FLX 0736	33.01	58.61	7.89	.	.	.	.	.	.	.	.	0.49
FLX 0712	27.36	58.59	4.05	.	.	.	10.0	.	.	.	.	.
FLX 0735	6.65	58.58	31.08	.	.	.	.	.	.	.	.	3.69
FLX 0739	33.39	58.53	8.08	.	.	.	.	.	.	.	.	.
FLX 0729	29.42	58.52	12.06	.	.	.	.	.	.	.	.	.
FLX 0711	10.72	58.49	26.47	.	.	.	.	.	.	.	.	4.32
FLX 0713	4.84	58.47	24.91	.	.	8.39	.	.	.	.	.	3.39
FLX 0714	.	58.44	41.31	.	.	.	.	.	.	.	.	0.25
FLX 0744	26.84	55.37	10.09	.	.	.	6.49	.	.	.	.	1.21
FLX 0737	6.15	38.35	46.89	.	.	.	.	.	.	.	.	8.61
FLX 1301	45.83	37.63	12.67	.	.	.	.	.	.	.	.	3.87
FLX 0716	15.09	37.63	37.97	.	.	.	.	.	.	.	.	9.31
FLX 0731	54.31	37.52	8.17	.	.	.	.	.	.	.	.	.
FLX 0732	58.75	33.71	7.54	.	.	.	.	.	.	.	.	.
FLX 0734	6.3	33.65	50.28	.	.	.	.	.	.	.	.	9.77
FLX 1401	33.00	33.61	33.36	.	.	.	.	.	.	.	.	0.030
FLX 0718	6.21	33.56	49.69	.	.	.	.	.	.	.	.	10.54
FLX 0717	11.92	33.52	41.04	.	.	.	.	.	.	.	.	13.52
FLX 1403	5.90	29.36	53.80	0.010	.	0.200	0.030	0.010	.	.	.	10.68
FLX 0721	99.97	.	0.008	.	0.005	.	0.005	0.007	0.005	.	.	.
FLX 0719	99.94	.	0.06	.	.	.	.	.	.	.	.	.
FLX 0730	93.56	.	6.44	.	.	.	.	.	.	.	.	.
FLX 1303	92.76	.	4.92	.	.	.	.	.	.	.	.	2.32
FLX 0733	83.75	.	16.25	.	.	.	.	.	.	.	.	.
FLX 1406	34.98	.	6.50	.	.	.	58.52	.	.	.	.	.
FLX 0742	0.005	99.99	0.005	.	.	.	.	.	.	.	.	.
FLX 0740	.	.	0.005	.	0.09	.	.	.	99.90	0.005	.	.
FLX 0723	.	.	0.01	0.01	.	.	99.96	0.01	0.01	.	.	.
FLX 0722	.	.	.	.	0.02	.	0.02	99.95	0.01	.	.	.
FLX 0741	.	.	4.16	.	.	.	.	95.84	.	.	4.63	.
FLX 0902	.	.	.	.	.	.	.	95.37	.	.	.	.
FLX 0901	.	.	.	.	.	.	.	95.23	.	4.77	.	.
FLX 1202	.	.	.	.	10.0	.	.	90.0	.	.	.	.
FLX 1201	.	.	.	.	25.0	.	.	75.0	.	.	.	.
Number	Ag	Au	Cu	Fe	Ir	Ni	Pd	Pt	Rh	Ru	W	Zn

RM LARGER JEWELRY SAMPLES

16 mm Ø mounted in 36mm Ø x 10mm

Number	Ag	Au	Cu	Ni	Pd	Zn
FLX 0720-16	.	99.99	0.002	.	.	.
FLX 0720-16a	.	99.99	.	.	.	.
FLX 0743-16	.	80.15	1.05	14.53	.	4.27
FLX 0704-16	2.79	75.08	9.68	.	12.45	.
FLX 0704-16c	3.05	75.08	9.37	.	12.5	.
FLX 0715-16	.	59.12	25.15	6.54	.	9.19
FLX 0738-16	19.8	58.58	21.1	.	.	0.52
FLX 0744-16	26.27	55.54	10.25	.	6.56	1.38
FLX 0734-16	6.24	33.52	49.82	.	.	10.42
FLX 0734-16a	7.09	33.41	48.82	.	.	10.68
FLX 0732-16	58.61	33.33	8.06	.	.	.

Ir, Pd, Pt, Rh: 0.002
last of stock

<- THIS ONE SOLD OUT

last of stock

CRM GOLD ALLOYS

analysis listed in mass % ~16 mm disc mounted in acrylic 40 mm Ø x 5 mm

Number	Alloy	Ag	Au	Cu	Ni	Zn
ERM-EB508	Yellow Gold	24.90	75.12	.	.	.
ERM-EB507	White Gold	3.02	75.10	14.69	4.99	2.107
ERM-EB506	Rose Gold	3.90	58.56	35.65	.	1.891

RM GOLD ROD

analysis listed in mg/kg

Number	Ag	Cu	Fe	In	O	Units
SRM 685	(0.1)	0.1	0.2	(0.007)	(<2)	Rod 5.9 mm Ø x 2.5 cm

SILVER

analysis listed in mg/kg

131X PAG: RM, 34 Ø x 12mm

131X PAG: RM, 25 Ø x 3mm

IMN SH: CRM 40 Ø x ~15-20mm

Number	Cu	Al	As	Au	Bi	Cd	Fe	Ga	In	Ir	Mn	Ni	P	Pb	Pd	Pt	Rh	Sb	Se	Si	Sn	Te	Tl	Zn
131X AGP1B	815	.	145	521	523	377	57	.	.	.	404	276	.	420	332	505	.	485	299	.	505	435	.	502
131X PAG2A	400	2	8	20	12	5	7	15	.	0.02	10	9	2	12	180	10	2	12	10	4	14	15	.	40
131X AGP2B	193	.	29	114	96	56	(20)	.	.	.	49	57	.	75	105	112	.	107	65	.	95	90	.	109
IMN SH2	182	.	27.2	20.6	28.2	23.3	13.5	.	30.3	.	8.21	12.5	.	26.0	8.5	9.5	.	25.1	27.4	.	.	8.6	9.3	22.3
131X PAG1A	75	8	12	120	40	35	5	60	.	0.02	35	25	4	40	180	35	<1	50	35	30	40	120	.	50
131X AGP3B	66	.	6	26	12	6	(11)	.	.	.	3	12	.	12	16	23	.	21	16	.	22	18	.	34
IMN SH3	59.0	.	11.0	7.7	9.2	9.6	11.3	.	8.7	.	27.3	29.7	.	44.9	25.7	25.4	.	48.6	8.7	.	.	25.7	25.8	43.8
131X AGP4B	41	.	3	9	7	2	(23)	.	.	.	3	6	.	5	7	7	.	12	6	.	6	5	.	20
IMN SH4	12.3	.	1.8	1.7	1.4	2.2	28.5	.	(1.3)	.	45.3	51.4	.	81.1	42.6	42.7	.	80.0	1.1	.	.	42.3	42.4	95.9

RM SILVER ALLOYS

analysis in mass %

Number	Ag	Au	Cu	Pb	Zn	Units
132X AGB100C	99.94	.	0.009	.	.	~40 mm Ø x ~10 mm
132X AGB100A	99.89	.	0.136	.	.	~40 mm Ø x ~10 mm
132X AGB100B	99.84	.	0.012	.	.	~40 mm Ø x ~10 mm
132X AGB95A	94.40	.	5.13	.	.	~40 mm Ø x ~10 mm
132X AGB94A	93.98	.	5.83	.	.	~40 mm Ø x ~10 mm
132X AGB93B	92.70	.	7.27	.	.	~40 mm Ø x ~10 mm
132X 925Zn1B	92.70	.	6.09	.	1.39	25 mm Ø x 3 mm
132X 925Zn3B	92.64	.	4.53	.	2.88	25 mm Ø x 3 mm
132X AGB90A	90.16	.	9.56	.	.	~40 mm Ø x ~10 mm
132X AGB90B	89.73	.	10.24	.	.	~40 mm Ø x ~10 mm
132X AGB88B	88.12	.	11.87	.	.	~40 mm Ø x ~10 mm
132X AGB88A	87.60	.	12.26	.	.	~40 mm Ø x ~10 mm
132X AGB87B	87.13	.	12.67	.	.	~40 mm Ø x ~10 mm
132X AGB85C	84.87	.	15.09	.	.	~40 mm Ø x ~10 mm
132X AGB75B	75.20	.	24.75	.	.	~40 mm Ø x ~10 mm
132X AGB75C	75.11	.	24.53	.	.	~40 mm Ø x ~10 mm
133X AGQ3C	rem	1.975	9.612	0.921	.	25 mm Ø x 3 mm
133X AGQ2C	rem	0.978	5.808	0.469	.	25 mm Ø x 3 mm
133X AGQ1C	rem	0.251	2.532	0.245	.	25 mm Ø x 3 mm

RM SILVER ALLOYS

analysis in mass %

Number	Au	Bi	Cu	Pb	Sb	Se	Si	Sn	Zn	Al	As	Cd	Co	Cr	Fe	Ge	In
133X AGA1A	1.48	0.194	19.95	0.207	0.050	0.0169	.	0.291	0.211	0.0096	0.0255	0.0165	0.0406	.	0.039	0.0107	0.0037
133X AGA2A	0.507	0.113	10.00	1.02	0.192	0.0078	.	0.520	0.502	0.0019	0.0144	0.0113	0.0163	.	0.027	0.0047	0.0065
133X AGA3A	0.258	0.048	4.91	1.89	0.459	0.0044	.	0.921	0.816	(0.0020)	0.0080	0.0042	0.0050	.	(0.015)	0.0045	0.0134
131X AgSe2A	.	0.0790	0.1333	.	.	0.0465	0.0039	.	.	0.0043	.	.	.	0.0037	0.0022	.	.
131X AgSe1A	.	0.0304	.	.	.	0.0162	.	.	.	.	.	.	.	.	0.0023	.	.

Number	Mn	Ni	Pd	Pt	Te	Units
133X AGA1A	0.0061	0.0118	0.0054	0.0067	0.0271	~25 mm Ø x ~3 mm
133X AGA2A	0.0115	0.0264	0.0076	0.0114	0.0098	~25 mm Ø x ~3 mm
133X AGA3A	0.0098	0.0450	0.0156	0.0256	0.0054	~25 mm Ø x ~3 mm
131X AgSe2A	.	.	.	.	.	~40 mm Ø x ~10 mm
131X AgSe1A	.	.	.	.	.	~40 mm Ø x ~10 mm

TIN

= class, where 1 = CRM and 2 = RM

analysis listed in mass %

#	Number	Ag	Al	As	Au	Bi	C	Cd	Co	Cr	Cu	Fe	Ga	Ge	Hg	In
2	BCS 192g	.	.	.	.	.	0.001	.	.	.	0.00007	0.0002	.	.	.	.
1	71X SR3F	0.050	(0.0014)	0.097	0.0145	0.123	.	0.100	.	.	0.121	0.0203	0.0339	.	0.115	0.104
1	71X SR2F	0.0305	0.0022	0.0070	0.0077	0.0403	.	0.0351	0.0064	0.0031	0.116	0.0133	.	0.009	0.141	0.0597
1	71X SR1E	0.0121	(0.0016)	0.0102	0.0014	0.0107	.	0.0104	.	.	0.0111	(0.0021)	0.0049	.	0.0142	0.0120
1	71X SR0C	0.0024	0.0414	0.00053	0.0012	0.0029	.	0.0024	0.00040	.	0.0073	0.0040	0.0054	0.0021	0.0099	0.0088
1	SRM 1727	.	.	(<0.0100)	.	(0.0008)	.	.	(0.0002)	.	(0.0004)	(0.0020)	.	.	.	(0.0020)
1	SRM 1728	0.4591	.	.	.	(0.0128)	.	0.00582	(0.0057)	(0.00012)	3.06	0.0111	.	.	0.011198	(0.0031)
1	SRM 1729	(<0.0075)	(0.0460)	.	.	0.01147	.	.	.	.	(0.0024)	(0.00141)	.	.	.	.

Number	Ni	P	Pb	S	Sb	Se	Si	Sn	Te	Tl	Zn	Melt °C	Units
BCS 192g	0.00005	.	0.00007	.	.	.	.	99.997	.	.	0.00006	231.9	300 g block or 100 g chips
71X SR3F	0.0371	.	0.306	.	0.128	0.0031	.	.	0.070	.	0.054	.	-40 mm Ø x -15 mm
71X SR2F	0.0183	(0.007)	0.151	.	0.074	.	.	.	0.0246	0.005	0.0058	.	-40 mm Ø x -15 mm
71X SR1E	0.0041	.	0.0324	.	0.0156	(0.0015)	.	.	0.0112	.	0.0146	.	-40 mm Ø x -15 mm
71X SR0C	0.0025	0.0004	0.0457	.	0.0055	0.0006	.	.	0.0021	.	0.0053	.	-40 mm Ø x -15 mm
SRM 1727	(0.0003)	.	0.003326	.	(0.0040)	.	.	.	.	.	.	.	30 mm x 30 mm x 30 mm
SRM 1728	0.00817	(0.0010)	0.0544	0.00349	(0.0087)	.	(0.0045)	(96.3)	.	.	(0.0156)	.	39 mm Ø x 15 mm
SRM 1729	(0.00022)	.	0.000311	.	(0.00964)	.	(0.0020)	(96.9)	.	.	0.0518	.	39 mm Ø x 15 mm

RM

TIN - LOW ALLOY

37 mm Ø x 12 mm

Number	Ag	Al	As	Bi	Cd	Co	Cu	Fe	In	Ni	Pb	Sb	Sn	Zn
NF 54-1	0.005	0.005	<0.1	0.002	0.0002	0.002	0.01	<0.1	0.005	0.002	0.03	0.005	Rem	<0.1
NF 54-2	0.01	0.01	<0.1	0.005	0.0005	0.005	0.05	<0.1	0.01	0.005	0.15	0.01	Rem	<0.1
NF 54-3	0.03	0.03	<0.5	0.01	0.001	0.01	0.15	<0.1	0.02	0.01	0.40	0.02	Rem	<0.1
NF 54-4	0.06	.	<0.5	0.02	0.005	0.02	0.30	<0.1	0.04	0.02	0.70	0.04	Rem	<0.1

RM

BISMUTH AND SULPHUR IN TIN

certified analysis in bold, rest is informational composition

37 mm Ø x 12 mm

Number	Bi	S	Ag	Al	As	Au	Cd	Cu	Fe	In	Ni	P	Pb	Sb	Sn	Zn
NF 60-4	3.99	<0.001	0.001	<0.001	<0.01	<0.001	<0.001	0.001	<0.001	0.005	<0.001	<0.01	Rem	0.005	60	<0.001
NF 60-3	3.00	<0.001	0.001	<0.001	<0.01	<0.001	<0.001	0.001	<0.001	0.005	<0.001	<0.01	Rem	0.005	60	<0.001
NF 60-2	2.39	<0.001	0.001	<0.001	<0.01	<0.001	<0.001	0.001	<0.001	0.005	<0.001	<0.01	Rem	0.005	60	<0.001
NF 60-1	2.01	<0.001	0.001	<0.001	<0.01	<0.001	<0.001	0.001	<0.001	0.005	<0.001	<0.01	Rem	0.005	60	<0.001
NF 59-5	0.008	0.020	3.98	<0.001	<0.01	<0.001	<0.001	0.51	0.005	0.006	0.001	<0.01	0.056	0.023	Rem	0.001
NF 59-4	0.008	0.0085	3.98	<0.001	<0.01	<0.001	<0.001	0.51	0.005	0.006	0.001	<0.01	0.056	0.023	Rem	0.001
NF 59-3	0.008	0.0048	3.98	<0.001	<0.01	<0.001	<0.001	0.51	0.005	0.006	0.001	<0.01	0.056	0.023	Rem	0.001
NF 59-2	0.008	0.0007	3.98	<0.001	<0.01	<0.001	<0.001	0.51	0.005	0.006	0.001	<0.01	0.056	0.023	Rem	0.001
NF 59-1	0.008	<0.0006	3.98	<0.001	<0.01	<0.001	<0.001	0.51	0.005	0.006	0.001	<0.01	0.056	0.023	Rem	0.001

CRM

SPECIALTY TIN BASE LOW-LEAD and LEAD-FREE SOLDERS

analysis listed in mass %

-40 mm Ø x -15 mm

Number	Ag	Al	As	Au	Bi	Cd	Co	Cu	Fe	Ge	Hg	In	Ni	P	Pb	S	Sb	Se	Zn
74X CA5B	4.09	(0.0014)	0.0125	0.0091	0.0050	0.0023	.	1.189	0.0021	.	0.0030	0.0129	0.0149	(0.011)	0.044	.	0.124	(0.0004)	(0.0019)
74X CA7B	4.02	Cr:0.0045	0.0085	.	0.0102	0.0059	(0.0018)	0.347	0.007	.	0.049	0.0053	0.0315	.	0.107	.	0.0194	.	0.0501
74X AB1A	3.58	.	0.0280	0.0010	0.997	0.0199	0.0032	0.0285	0.0435	.	.	0.0262	0.0036	.	0.0353	.	0.0111	.	.
74X CA2B	3.50	<0.001	0.018	0.0009	0.0365	0.0017	0.0019	0.795	0.0023	0.023	0.0017	0.0053	0.0361	0.010	0.0496	.	0.079	0.0022	0.0005
74X CA4C	3.01	0.0005	0.0076	.	0.0608	0.0018	0.0052	0.545	0.0052	.	0.0054	0.0057	0.0872	Cr:0.0094	0.0800	.	0.0709	(0.0007)	(0.0055)
74X CA3B	2.98	0.0010	0.0039	0.007	0.0156	0.00045	.	0.0869	0.006	0.0093	.	0.0042	0.0077	0.031	0.0491	.	0.0266	.	0.0009
74X HAG	2.80	(0.002)	0.0032	.	0.0639	0.0018	.	0.629	0.0029	.	.	0.0090	0.0133	(0.0009)	0.077	.	2.10	(0.0008)	2.73
74X CA8B	2.47	.	0.0144	.	0.0172	0.0101	0.0202	0.950	0.0043	0.0020	0.101	0.0062	0.0020	0.010	0.084	.	0.0180	.	.
74X CA9A	1.002	0.0007	0.0173	0.0025	0.0364	0.0015	.	0.097	0.0085	0.0049	.	0.0165	0.0039	0.011	0.038	.	0.076	.	0.0010
74X EF	0.667	(0.0012)	0.0092	.	0.0099	0.0003	.	2.94	0.0008	.	.	0.0074	0.0069	(0.0012)	0.0248	.	0.0168	0.0008	(0.0054)
74X AMF	0.496	(0.0012)	0.0038	.	0.190	0.0061	.	3.07	(0.0006)	.	.	0.0082	0.0260	(0.0016)	0.126	.	1.064	(0.0013)	(0.0055)
74X CA1B	0.440	0.0262	.	0.0053	0.0131	0.0071	.	0.682	.	.	.	.	.	.	0.077	.	0.0169	.	.
74X CA6B	0.305	(0.0003)	0.0133	0.0050	0.0098	0.0005	.	0.602	0.0120	.	0.0039	0.0243	0.0246	(0.001)	0.0287	.	(0.01)	(0.0005)	(0.0005)
74X WSA	0.298	(0.0007)	0.0105	(0.0002)	0.0063	0.00140	.	4.58	(0.0036)	.	.	0.0032	0.0048	0.0122	0.037	.	1.49	.	0.0009
74X HNE	0.143	0.005	0.010	.	0.122	0.0057	.	3.82	0.010	.	.	.	0.185	(0.002)	0.0404	.	0.037	0.0016	(0.0009)
74X OAA	0.100	(0.0007)	0.080	(0.0001)	1.065	0.00063	.	3.41	0.007	.	.	0.0034	0.0025	0.0072	0.128	.	0.0098	.	(0.002)
74X HBG	0.086	(0.0026)	0.045	.	0.038	0.0103	.	4.49	0.0138	.	.	0.0179	1.22	(0.002)	0.056	.	4.81	0.0038	(0.02)
74X GE2A	0.079	0.068	.	.	.	0.0086	.	0.713	.	0.479	.	.	0.031	.	0.0467	.	.	.	.
74X GE1A	0.052	0.065	.	.	.	0.0059	.	0.662	.	0.046	.	.	0.0289	.	0.0339	.	.	.	.
74X TCF	0.039	(0.001)	0.024	.	0.106	0.0150	.	4.99	0.0031	.	.	0.0215	0.0167	(0.002)	0.183	.	0.124	0.0473	0.004
74X BZ1A	0.004	0.0021	0.0119	.	3.03	0.0012	.	0.026	0.011	.	.	.	0.0097	.	0.0238	.	0.031	.	8.27

RM TIN - SILVER ALLOYS

37 mm Ø x 12 mm

Number	Ag	Bi	Cu	Ge	Hg	In	Ni	P	Pb	Sb	Sn	Zn
NF 46-3	5.0 #	0.25	0.030	# = segregation in Ag noted					0.21	0.059	Rem	(0.017)
NF 56-5	4.49	0.029	0.54	.	0.0024	.	.	0.006	0.26	.	Rem	.
NF 56-6	4.24	0.096	0.80	.	0.009	.	.	0.012	0.024	.	Rem	.
NF 46-2	4.1	0.095	0.096	.	.	.	.	.	0.059	0.11	Rem	(0.007)
NF 57-2	4.01	.	0.46	.	0.0002	.	.	0.006	<0.001	.	Rem	.
NF 56-2	3.77	0.50	0.60	.	0.0004	.	.	0.009	0.051	.	Rem	.
NF 56-3	3.53	.	0.4	.	0.014	.	.	0.003	0.009	0.50	Rem	.
NF 56-4	3.26	0.20	0.30	.	0.0045	.	.	0.021	0.22	.	Rem	.
NF 46-1	3.1	0.05	0.19	.	.	.	.	.	0.043	0.205	Rem	(0.015)
NF 57-1	3.00	0.004	0.49	.	0.0016	.	.	0.004	0.076	.	Rem	.
NF 9-1	3.00	0.048	0.073	.	.	.	.	.	Rem	0.51	59.90	.
NF 61-4	2.58	.	.	.	.	.	.	.	Rem	.	62.0	.
NF 63-6	2.56	.	0.50	0.042	.	<0.001	0.0073	.	0.009	.	Rem	.
NF 56-1	2.54	0.006	0.91	.	0.018	.	.	0.020	0.10	.	Rem	.
NF 61-3	2.33	.	.	.	.	.	.	.	Rem	.	62.0	.
NF 9-2	2.00	0.093	0.040	.	.	.	.	.	Rem	0.38	61.90	.
NF 61-2	1.81	.	.	.	.	.	.	.	Rem	.	62.0	.
NF 61-1	1.54	.	.	.	.	.	.	.	Rem	.	62.0	.
NF 63-4	1.50	.	0.194	0.025	.	0.027	0.12	.	0.012	.	Rem	.
NF 63-3	1.18	.	0.53	0.005	.	0.053	0.066	.	0.024	.	Rem	.
NF 63-2	1.02	.	0.104	0.052	.	0.005	0.027	.	0.18	.	Rem	.
NF 63-5	1.01	.	0.51	0.010	.	0.11	0.065	.	0.018	.	Rem	.
NF 9-3	1.00	0.25	0.010	.	.	.	.	.	Rem	0.23	63.60	.
NF 63-1	0.74	.	0.077	0.079	.	0.200	0.068	.	0.009	.	Rem	.
NF 58-3	0.51	0.077	0.59	.	0.0043	.	.	0.010	0.040	.	Rem	.
NF 58-1	0.32	0.12	0.69	.	0.0003	.	.	0.001	0.085	.	Rem	.
NF 58-2	0.21	0.095	0.79	.	0.0024	.	.	0.006	0.008	.	Rem	.

CRM TIN BASE SETS

available in sets only, as grouped

Number	Ag	Al	As	Au	Bi	Cd	Cu	Fe	In	Ni	Pb	Sb	Sn	Zn
Discs 40 mm Ø x 25 mm														
IMN LBA 1	0.632	.	0.0459	0.0115	0.230	0.00085	0.282	0.0195	0.208	0.0055	0.228	0.0517	Rem	0.0032
IMN LBA 2	0.697	(0.0029)	0.0314	0.0259	0.175	0.0052	0.487	0.0182	0.127	0.0107	0.319	0.0979	Rem	0.0047
IMN LBA 3	0.0971	0.0022	0.0239	0.0468	0.0989	0.0039	0.885	0.0057	0.0949	0.0224	0.141	0.142	Rem	0.0020
IMN LBA 4	0.0976	0.0061	(0.0086)	0.0632	0.0364	0.0058	1.21	0.0114	0.0503	0.0320	0.0862	0.457	Rem	0.0006
IMN LBA 5	0.214	.	(0.0090)	0.691	0.325	0.0053	0.763	0.0098	0.0228	0.0346	0.0579	0.286	Rem	(0.0009)
Discs 40 mm Ø x 25 mm														
IMN LCA 1	0.210	<0.0012	0.0494	0.0677	0.269	0.0093	.	.	0.141	.	0.229	0.490	Rem	.
IMN LCA 2	0.158	.	0.0864	0.0542	0.146	0.0073	2.67	0.0155	0.0610	0.0210	0.0773	0.138	Rem	0.0016
IMN LCA 3	0.107	(0.0011)	0.0285	0.0260	0.100	0.0025	3.53	0.0143	0.0081	0.0102	0.137	0.101	Rem	0.0042
IMN LCA 4	0.0545	(0.0023)	0.0145	0.0100	0.0403	0.0115	4.51	0.0101	0.0442	0.0056	0.0890	0.0479	Rem	0.0103
IMN LCA 5	0.221	.	0.0386	0.0670	0.263	0.0006	1.52	0.0295	0.0533	0.0315	0.232	0.458	Rem	0.0011
Rods 10 mm Ø x 100 mm														
IMN L89 1	.	.	0.019	.	0.012	0.19	3.20	0.18	.	0.010	0.072	5.66	Rem	0.099
IMN L89 2	.	.	0.037	.	0.026	0.091	4.15	0.086	.	0.031	0.13	6.39	Rem	0.059
IMN L89 3	.	.	0.065	.	0.052	0.041	3.49	0.058	.	0.090	0.29	7.41	Rem	0.042
IMN L89 4	.	.	0.12	.	0.099	0.021	2.81	0.028	.	0.16	0.52	8.14	Rem	0.020
IMN L89 5	.	.	0.18	.	0.20	0.011	2.12	0.013	.	0.33	1.11	8.86	Rem	.
IMN L89 6	.	.	0.029	.	0.014	0.19	4.51	0.17	.	0.014	0.20	8.03	Rem	0.096
Discs 40 mm Ø x 25 mm														
IMN LA 1	.	.	0.012	.	0.014	1.41	2.45	0.012	.	0.011	3.18	6.79	Rem	0.0016
IMN LA 2	.	.	0.092	.	0.033	0.88	3.84	0.018	.	0.094	2.17	7.81	Rem	.
IMN LA 3	.	.	0.24	.	0.059	0.50	8.13	0.059	.	0.28	1.19	10.22	Rem	0.0095
IMN LA 4	.	.	0.43	.	0.085	0.096	6.95	0.080	.	0.45	0.41	11.66	Rem	.
IMN LA 5	.	.	0.54	.	0.099	0.011	5.45	0.096	.	0.53	0.070	13.58	Rem	0.020
Discs 40 mm Ø x 30 mm														
IMN L 1	.	.	0.051	.	0.17	0.0020	0.11	.	.	.	Rem	0.52	56.06	0.00093
IMN L 2	.	.	0.034	.	0.11	0.0043	0.075	(0.011)	.	.	Rem	0.35	59.09	0.0019
IMN L 3	.	.	0.092	.	0.22	0.0065	0.034	(0.023)	.	.	Rem	0.14	60.18	0.0064
IMN L 4	.	.	0.017	.	0.055	0.0080	0.013	(0.0085)	.	.	Rem	0.079	62.81	0.0011
IMN L 5	.	.	0.0035	.	0.014	0.0097	0.0037	.	.	.	Rem	0.011	64.96	0.0056
Number	Ag	Al	As	Au	Bi	Cd	Cu	Fe	In	Ni	Pb	Sb	Sn	Zn

CRM TITANIUM

= class, where 1 = CRM and 2 = RM

#	Number	Al	B	C	Co	Cr	Cu	Fe	H	Mn	Mo	N	Nb	Ni	O
1	IARM 311A	0.32	.	0.009	.	0.013	0.0013	0.060	0.0021	0.0013	0.0012	0.012	(0.002)	0.014	0.083
1	BCR 090	(0.074)	0.00282	.	0.0501	0.0533	0.0513	0.0563	.	0.0314	0.0488	.	(0.0492)	0.0667	.
1	BS T-81	0.0664	0.0082	0.0161	0.0395	0.0294	0.0244	0.1144	0.0035	0.0404	0.0279	0.0037	0.0191	0.0090	0.0669
1	BS T-4A	0.040	.	0.014	.	0.026	(0.001)	0.19	(0.0027)	0.003	0.0006	0.005	.	0.014	(0.37)
1	IARM 312A	0.006	.	0.004	(0.001)	(0.002)	(0.002)	0.028	0.0049	(0.001)	(0.002)	0.0023	.	(0.002)	0.066
1	BS T-2A	0.005	.	(0.007)	.	0.018	(0.001)	0.156	(0.0020)	0.003	0.002	(0.0044)	.	0.021	(0.12)
1	IARM 174C	(0.003)	.	0.0057	(0.001)	0.009	0.0015	0.28	0.0027	0.0019	0.002	0.004	(0.004)	0.007	0.34
BCR: HIP; 090A: 40mm Ø x 20mm; 090B: ~25g of 0.2g cubes BS: 38-40 Ø x ~7, 12, or 19mm IARM: 31mm Ø x 2 or 18mm															
Number	P	Pd	Ru	S	Si	Sn	V	W	Y	Zr	Grade				
IARM 311A	.	.	.	.	0.005	0.0020	0.004	(0.002)	(0.0002)	0.012	BT1-0				
BCR 090	.	.	.	.	.	(0.071)	(0.057)	(0.050)	.	(0.0436)	.				
BS T-81	.	0.0398	0.0310	.	0.0474	0.0155	0.0186	0.0372	0.0017	0.0163	Ti Cp 17	17025			
BS T-4A	(0.001)	.	.	(0.0004)	0.011	0.005	(0.001)	<0.002	.	<0.002	Ti Cp 1	17025			
IARM 312A	.	(0.004)	.	(0.001)	0.006	0.0012	(0.002)	.	(0.0004)	(0.001)	Ti CP 4.1				
BS T-2A	.	.	.	(0.0004)	0.002	0.006	<0.002	<0.002	.	<0.003	Ti Cp 1	17025 last			
IARM 174C	.	.	.	(0.0005)	(0.006)	0.023	(0.002)	.	(0.0004)	(0.003)	Ti CP 1.4	18mm last, 2mm OK			

CRM TITANIUM

= class, where 1 = CRM and 2 = RM

analysis listed in mass %

* Provisional Analysis

#	Number	Al	Cr	Fe	Mn	Mo	Nb	Sn	Ta	V	W	Zr	C	H	N	O
1	SRM 2062	30.31	.	.	.	.	10.78	.	.	.	4.38	.	.	.	.	.
2	CT 6AL4V	6.39	.	0.14	.	.	.	.	.	4.01	.	.	.	.	.	.
1	IARM 175D *	6.38	0.015	0.22	(0.002)	(0.003)	.	(0.01)	.	4.00	.	.	0.008	0.0028	0.030	0.177
1	SRM 654b	6.34	0.025	0.23	.	0.013	.	0.023	.	4.31	.	0.008	.	(0.002)	.	(0.17)
1	BS T-5A	6.33	0.013	0.170	<0.002	0.004	.	0.009	.	4.10	<0.01	0.003	0.011	(0.0025)	0.008	0.190
1	101X Ti3A	6.14	0.0194	0.104	.	0.0213	.	0.0215	.	4.00	.	0.0152	0.0619	0.0034	0.010	0.198
1	IARM 336B	6.04	(0.001)	0.132	.	6.16	.	2.04	.	(0.004)	(0.005)	4.12	0.006	0.0029	0.0016	0.101
1	101X Ti2A	6.02	0.0054	0.053	.	2.08	.	2.05	.	.	.	3.97	0.016	0.0076	0.0053	0.143
1	IARM 177C	6.02	0.012	0.033	0.0015	1.96	.	2.02	.	0.020	.	3.99	0.005	0.0014	0.0022	0.107
1	BCR 089	5.97	.	.	.	.	.	.	.	3.976	.	.	.	.	.	.
1	IARM 176C *	5.97	0.011	0.14	(0.001)	0.005	.	0.007	.	4.00	.	(0.003)	0.012	0.0034	0.005	0.111
1	IARM 300A *	5.97	0.009	0.19	(0.001)	(0.001)	6.9	(0.01)	.	(0.01)	.	.	0.006	0.0019	0.004	0.16
1	IARM 336A	5.9	(0.002)	0.115	.	6.16	.	2.03	.	0.005	(0.004)	3.92	0.005	0.0022	0.0015	0.102
1	IARM 285A	5.81	(0.001)	0.037	(0.001)	0.77	2.00	(0.004)	0.97	(0.004)	(0.01)	(0.002)	0.007	0.0038	0.0043	0.076
1	IARM 337A	5.60	2.01	0.114	.	2.05	(0.004)	1.96	.	(0.003)	(0.003)	1.89	0.008	0.005	0.0017	0.104
1	IARM 314B	5.57	3.08	0.39	(0.001)	4.88	0.009	0.022	(0.002)	5.04	(0.003)	(0.002)	0.010	0.0057	0.0045	0.130
1	IARM 178C *	5.44	0.014	0.66	(0.002)	0.012	(0.01)	1.97	.	5.43	.	(0.004)	0.022	0.0025	0.011	0.17
1	IARM 271A	5.28	0.016	0.31	(0.002)	0.011	.	2.49	.	0.09	.	0.015	0.026	0.013	0.012	0.16
1	IARM 345A *	5.12	3.89	0.120	0.0009	4.09	0.002	1.99	(0.003)	0.004	(0.003)	1.91	0.010	0.0040	0.0025	0.120
1	IARM 280A	4.11	0.0055	0.044	(0.002)	4.01	(0.001)	2.07	.	0.023	.	(0.002)	0.005	0.0015	0.0014	0.19
1	IARM 286A	3.25	6.3	0.09	(0.002)	4.15	.	(0.003)	.	8.1	.	4.08	0.010	0.0039	0.010	0.089
1	IARM 344A *	3.16	3.08	0.20	(0.002)	(0.003)	.	3.09	.	15.0	.	(0.002)	0.011	0.016	0.006	0.11
1	SRM 1128	3.06	2.96	0.134	.	.	.	3.04	.	15.13	.	.	0.011	.	.	.
1	IARM 261A	3.00	0.013	0.19	0.0011	(0.003)	.	0.008	.	2.48	.	(0.002)	0.007	0.0023	0.007	0.10
2	BS T-22	0.004	1.22	1.19	2.02	1.15	.	0.019	.	0.50	0.51	(0.001)	0.005	.	(0.01)	(0.09)
2	BS T-24	0.002	0.54	0.54	4.7	0.51	.	0.019	.	1.22	0.37	(0.001)	0.005	.	0.006	(0.09)
1	SRM 643	.	.	.	11.6	.	.	.	.	.	.	.	.	.	.	.
1	SRM 642	.	.	.	9.0	.	.	.	.	.	.	.	.	.	.	.
1	SRM 641	.	.	.	6.6	.	.	.	.	.	.	.	.	.	.	.

Number	B	Co	Cu	Ni	P	Pd	S	Si	Ti	Y	Unit				
SRM 2062	.	.	.	.	.	.	.	.	53.92	.	24 mm Ø x 2 mm				
CT 6AL4V	.	.	.	.	.	.	.	.	.	.	30-35 mm Ø x 20-25 mm				
IARM 175D *	.	.	(0.002)	0.016	.	.	.	(0.009)	(89.1)	.	31 mm Ø x 2 or 18 mm				
SRM 654b	.	.	0.008	0.028	.	.	(0.001)	0.045	.	.	31 mm Ø x 19 mm				
BS T-5A	.	.	0.0025	0.012	.	.	<0.001	0.02	.	.	38 mm Ø x ~10 or 12 mm	17025 last			
101X Ti3A	.	.	0.0047	0.0303	.	.	.	0.013	.	0.0101	40 mm Ø x 13 mm				
IARM 336B	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	.	(0.002)	0.020	.	(0.0002)	31 mm Ø x 2 or 18 mm				
101X Ti2A	.	.	(0.003)	0.0073	.	.	.	0.110	.	0.0002	40 mm Ø x 13 mm				
IARM 177C	(0.001)	(0.001)	(0.003)	0.011	.	(0.004)	.	0.086	.	(0.0002)	31 mm Ø x 2 mm				
BCR 089	.	.	.	.	.	.	.	.	.	.	40 mm Ø x 20 mm	short expiry			
IARM 176C *	.	.	(0.003)	0.011	.	(0.004)	.	0.016	89.6	(0.0001)	31 mm Ø x 2 mm				
IARM 300A *	.	.	(0.003)	0.008	.	.	.	0.019	(86.7)	.	31 mm Ø x 2 or 18 mm				
IARM 336A	(0.001)	(0.002)	(0.002)	(0.002)	.	.	(0.002)	0.019	.	(0.0003)	31 mm Ø x 2 or 18 mm				
IARM 285A	(0.002)	(0.002)	0.008	0.006	.	(0.0004)	0.009	.	0.0024	.	31 mm Ø x 2 mm				
IARM 337A	(0.001)	0.0011	(0.002)	0.011	.	.	(0.001)	0.14	.	(0.0004)	31 mm Ø x 2 or 18 mm				
IARM 314B	(0.001)	(0.004)	0.002	0.0044	(0.001)	(0.003)	(0.001)	0.041	.	(0.001)	31 mm Ø x 2 or 18 mm				
IARM 178C *	.	.	0.62	0.013	.	.	.	0.047	(85.7)	.	31 mm Ø x 2 or 18 mm				
IARM 271A	.	.	0.004	0.035	(0.002)	.	(0.002)	0.021	.	.	31 mm Ø x 2 mm				
IARM 345A *	(0.001)	(0.002)	0.003	0.016	(0.002)	(0.001)	(0.001)	0.015	(82.8)	(0.0003)	31 mm Ø x 2 or 18 mm				
IARM 280A	.	(0.002)	0.003	0.012	.	(0.002)	(0.001)	0.47	.	(0.0003)	31 mm Ø x 2 or 18 mm				
IARM 286A	.	(0.006)	(0.004)	0.013	.	(0.02)	(0.001)	0.030	.	(0.001)	31 mm Ø x 2 mm				
IARM 344A *	.	(0.003)	(0.002)	0.011	.	.	.	0.027	(75.0)	(0.002)	31 mm Ø x 18 mm				
SRM 1128	.	.	.	.	.	.	.	.	.	.	35 mm Ø x 19 mm				
IARM 261A	.	.	(0.002)	0.006	.	.	(0.001)	0.012	.	(0.001)	31 mm Ø x 2 mm				
BS T-22	.	.	0.04	0.008	.	.	(0.002)	(0.02)	.	.	32 mm Ø x ~7 or 19+ mm				
BS T-24	.	.	0.020	(0.007)	.	.	(0.002)	(0.01)	.	.	32 mm Ø x ~7 or 19+ mm				
SRM 643	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm				
SRM 642	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm				
SRM 641	.	.	.	.	.	.	.	.	.	.	32 mm Ø x 19 mm				

ZINC

= class, where 1 = CRM and 2 = RM

analysis listed in mass %

Trace = informational values such as (<0.001) or lower

#	Number	Pb	Al	Cd	Cu	Fe	In	Mg	Mn	Ni	Sb	Sn	Tl
1	41X Z6A	0.031	0.0096	0.0093	0.0088	(0.002)	0.0228	<0.0005	0.0002	0.0002	.	0.0038	.
1	41X Z5N	0.0286	0.0243	0.0165	0.0109	0.0262	0.0057	0.0107	0.0049	0.0051	0.0054	0.0063	0.0068
1	ERM-EB325	0.0142	.	0.00947	0.00475	0.00561	.	.	.	.	.	0.00461	0.00368
1	41X Z11A	0.0077	0.0261	0.0155	0.0116	0.0019	0.0345	.	.	.	0.0026	0.0072	(0.0010)
1	41X Z4L	0.00584	0.0065	0.00437	0.00326	0.0148	0.00304	0.00331	0.00286	0.00320	0.00340	0.00221	0.00277
1	41X Z3M	0.00502	0.00158	0.00327	0.00345	0.00605	0.00233	(0.00034)	0.00524	0.00209	0.00167	0.00297	0.00210
2	BS SP-5	0.005	0.0003	<0.0004	<0.001	<0.001	.	<0.002	.	.	<0.001	0.0010	.
1	ERM-EB323	0.00486	.	0.000651	0.00189	0.00113	.	.	.	.	.	0.00187	0.00108
1	BCR 327	0.004094	.	0.03014	(0.000056)	0.01440	.	.	.	.	.	.	.
1	41X Z2P	0.00400	0.00015	0.00214	0.00201	0.00331	0.00111	(0.00033)	0.00341	0.00111	0.00020	0.00197	0.00112
1	BCR 326	0.003070	Trace	0.02030	0.01048	0.02648	.	.	.	.	.	.	.
2	BS SP-A	0.003	0.051	.	<0.0005	0.011	.	.	.	.	0.099	<0.001	.
1	41X Z1Q	0.00276	(0.00011)	0.00120	0.00116	0.00282	0.00026	(0.00010)	0.00047	0.00014	(0.00024)	0.00051	0.00028
1	ERM-EB324	0.00261	.	0.00489	0.000987	0.00585	.	.	.	.	.	0.00098	0.00199
2	BCS 194e	0.002	.	.	.	0.001	.	.	.	.	.	.	.
1	BAM M601	0.00157	<0.00005	0.000055	0.000189	0.000220	<0.000005	.	.	.	.	.	0.000225
1	ERM-EB322	0.00150	.	0.001508	0.000589	0.00191	.	.	.	.	.	0.00056	0.000528
1	SRM 683	0.00111	.	0.00011	0.00059	0.00022	Trace	.	Trace	.	.	(0.000002)	(0.00002)
1	SRM 631	(0.001)	0.50	0.0002	0.0013	0.005	0.0023	Trace	0.00015	Trace	.	0.0001	.
1	BCR 321	0.000485	<0.00007	(0.000023)	(0.000097)	(0.000222)	<0.00002	.	.	.	.	<0.00005	0.000078
1	SRM 682 *	.	(<0.000003)	(0.00001)	0.0000042	(0.00001)	.	(<0.00001)	Trace	(<0.00001)	.	(0.000002)	(<0.00002)

Number	Ag	Bi	Cr	Ga	Ge	Hg	Si	Zn	Melt °C	Units
41X Z6A	.	0.0122	(0.0001)	.	.	.	.	.	.	50 mm Ø x 20 mm
41X Z5N	.	0.0056	.	.	.	0.0050	.	.	.	~50 mm Ø x 20 mm
ERM-EB325	.	.	.	.	.	.	.	.	.	60 mm Ø x 30 mm
41X Z11A	.	0.0189	.	.	.	(0.0009)	.	.	.	50 mm Ø x 20 mm
41X Z4L	.	0.00319	.	.	.	0.0025	.	.	.	50 mm Ø x 20 mm
41X Z3M	.	0.00315	.	.	.	0.00289	.	.	.	~50 mm Ø x ~20 mm
BS SP-5	.	.	.	.	.	.	.	.	.	37 mm Ø x 12 mm
ERM-EB323	.	.	.	.	.	.	.	.	.	60 mm Ø x 30 mm
BCR 327	.	.	.	.	.	.	.	.	.	80 mm Ø x 20 mm
41X Z2P	.	0.00116	.	.	.	0.00150	.	.	.	~50 mm Ø x ~20 mm
BCR 326	.	.	.	.	.	.	.	.	.	80 mm Ø x 20 mm
BS SP-A	.	.	.	.	.	.	.	.	.	38 mm Ø x 14 mm
41X Z1Q	.	0.00030	.	.	.	0.00034	.	.	.	~50 mm Ø x ~20 mm
ERM-EB324	.	.	.	.	.	.	.	.	.	60 mm Ø x 30 mm
BCS 194e	.	.	.	.	.	.	.	99.99	419.5	300 g(4.5 x 3.5 x 3 cms)
BAM M601	.	.	.	.	.	.	.	.	.	45 mm Ø x 30 mm
ERM-EB322	.	.	.	.	.	.	.	.	.	60 mm Ø x 30 mm
SRM 683	0.00013	.	.	Trace	.	.	.	.	.	Cylinder segment 57mm Ø x 25mm x 19mm
SRM 631	Trace	.	0.0001	(0.0002)	(0.0002)	.	.	.	.	45 mm x 45 mm x 19 mm
BCR 321	.	.	.	.	.	.	.	.	.	80 mm Ø x 20 mm
SRM 682 *	(0.000002)	.	(<0.000006)	.	.	(<0.00005)	.	.	.	Cylinder segment 57mm Ø x 25mm x 19mm

* SRM 682 has trace informational B, Be, C, Ca, Cl, F, K, Li, N, and Nb.

CRM ELECTROLYTIC ZINC SETS

available in sets only, as grouped

Number	Al	Cd	Cu	Fe	Pb	Sn	Zn	
IMN ZA 1	.	0.0042	(0.0032)	0.00167	0.025	0.0038	Rem	Rods 10 mm Ø x 100 mm
IMN ZA 2	.	0.0029	0.0013	0.0061	0.011	0.0012	Rem	
IMN ZA 3	.	0.00092	0.00011	0.00078	0.0028	0.00036	Rem	
IMN ZA 4	.	0.00049	0.00032	0.00040	0.0016	0.00011	Rem	
IMN ZE 1	0.012	0.0019	0.011	0.020	0.018	0.0018	Rem	Discs 40 mm Ø x 25 mm
IMN ZE 2	0.0035	0.0031	(0.00037)	0.0052	0.0078	0.0074	Rem	
IMN ZE 3	0.025	0.0050	0.0032	.	0.0052	0.015	Rem	
IMN ZE 4	.	0.00023	0.013	(0.00035)	0.0012	0.0017	Rem	
IMN ZE 5	0.0011	0.0060	0.0049	0.011	0.0004	0.00045	Rem	

CRM ZINC ROHS MONITOR

cast 50 mm Ø x 20 mm

Number	Cd	Cr	Hg	Pb
41X ZSC6A	0.215	<0.0002	0.029	0.0077
41X ZSC3A	0.119	0.0148	0.0021	0.0273
41X ZSC1A	0.0288	0.0039	0.026	0.0621
41X ZSC4A	0.0131	0.0299	0.050	0.156
41X ZSC2A	0.0016	0.0036	0.0053	0.111

CRM ZAMAK (MAZAK) SPECIFICATIONS AND SUGGESTED SAMPLES

42X, 43X: ~50 mm Ø x ~15-20 mm BAM: 39 mm Ø x 39 mm BCR: 80 mm Ø x 20 mm SRM: 44 mm x 44 mm x 19 mm

Number	Al	Cu	Mg	Ni	Cd	Cr	Fe	Mn	Pb	Sn
Zamak 2	3.9-4.3	2.6-2.9	0.025-0.05	.	<0.003	.	<0.075	.	<0.004	<0.002
43X Z7A	3.68	3.14	0.062	0.0005	0.00092	0.0003	0.029	0.0025	0.0058	0.0031
43X Z6B	4.51	2.85	0.0238	0.0027	0.0031	0.0005	0.024	0.0022	0.005	0.0052
43X Z4C	4.79	2.69	0.0480	0.0258	0.0033	.	0.0017	0.0153	0.0062	0.0030
Zamak 5	3.9-4.3	0.75-1.25	0.030-0.06	.	<0.003	.	<0.075	.	<0.004	<0.002
Zamak 6	3.9-4.3	0.75-1.25	<0.05	.	<0.003	.	<0.075	.	<0.004	<0.002
43X Z3M	3.40	1.499	0.114	0.0062	0.0109	0.0046	(0.042)	0.0013	0.0077	0.0058
BCR 360	3.427	1.234	0.0705	0.0267	0.00595	.	.	.	0.00739	0.00330
43X Z2N	4.02	1.049	0.0885	0.0022	0.0080	0.0011	0.0023	0.099	0.0125	0.0052
SRM 630	4.30	0.976	0.030	0.0027	0.0048	0.0031	0.023	0.0106	0.0083	0.0040
ERM-EB602	4.08	0.812	0.0415	0.00025	0.00011	.	0.00073	.	0.00195	0.00010
BCR 361	4.068	0.798	.	.	(0.000080)	.	0.001034	.	0.000531	0.00463
43X Z1K	4.50	0.717	0.0256	0.0010	0.0014	0.0007	0.0070	0.0014	0.0038	0.0019
SRM 628	4.59	0.611	0.0094	0.030	0.0040	0.0087	0.066	0.0091	0.0045	0.0017
BCR 357	4.227	0.5849	0.0273	0.000982	0.000283	.	0.00257	.	0.00138	0.000351
43X Z1J	4.50	0.581	0.0145	0.0010	0.00037	0.0009	0.0058	0.0005	0.0017	(0.0007)
Zamak 3	3.9-4.3	<0.10	0.025-0.05	.	<0.003	.	<0.075	.	<0.004	<0.002
Zamak 7	3.9-4.3	<0.10	0.010-0.020	0.005-0.02	<0.002	.	<0.075	.	<0.002	<0.001
BCR 356	4.434	0.3944	0.01323	0.000343	0.000073	.	0.00315	.	0.000987	(0.000032)
42X Z6B	3.67	0.238	0.177	0.00030	0.0039	0.0034	0.008	0.0157	0.0093	0.0057
42X Z12A	4.717	0.156	0.0488	0.0413	0.00277	0.00063	0.0457	0.0483	0.0079	0.0022
42X Z3J	3.84	0.135	0.0503	0.0071	0.0065	.	0.0145	0.0090	0.0068	0.0048
SRM 627	3.88	0.132	0.031	0.0029	0.0051	0.0038	0.023	0.014	0.0082	0.0042
42X Z5M	4.33	0.111	0.0508	0.041	0.0013	(0.0002)	(0.05)	0.0049	0.0030	0.0012
BCR 355	3.443	0.1035	0.0786	0.0268	0.00581	.	.	.	0.00569	0.00291
42X Z4J	3.55	0.063	0.058	0.0177	0.0076	.	0.012	0.0077	0.0113	0.0060
SRM 626	3.56	0.056	0.020	0.047	0.0016	0.0395	0.103	0.048	0.0022	0.0012
SRM 625	3.06	0.034	0.070	0.0184	0.0007	0.0128	0.036	0.031	0.0014	0.0006
BCR 354	3.726	0.03123	0.0602	0.00831	0.00297	.	.	.	0.00308	0.00141
42X Z2K	3.79	0.0300	0.0146	0.0155	0.0017	(0.0001)	0.0055	0.0274	0.0029	0.0011
BCR 353	3.949	0.01000	0.04525	.	0.001044	.	.	.	0.00244	0.00056
42X Z1J	4.66	0.0050	0.0009	0.0014	0.0014	0.0004	0.013	0.0038	0.0017	0.0007
BCR 352	4.150	0.003126	0.02830	0.000674	0.000288	.	.	.	(0.00064)	0.00030
BCR 351	4.355	0.001213	0.01310	(0.00019)	(0.000021)	.	.	.	0.000450	<0.0001
Zamak 8	7.8-9.0	0.70-1.40	0.015-0.030	<0.02	<0.005	.	<0.1	.	<0.005	<0.003
43X Z14E	8.05	1.13	0.0133	0.0066	0.0083	0.0047	0.031	0.0050	0.015	0.0054

Number	Be	Bi	Ce	In	La	Sb	Si	Ti	Tl
Zamak 2	.	.	.	.	.	.	.	.	.
43X Z7A	0.0194	(0.0009)	.	.	.	0.0016	.	0.067	.
43X Z6B	.	0.0054	.	.	.	0.0044	.	.	.
43X Z4C	.	0.0113	.	.	.	(0.0023)	(0.0012)	.	.
Zamak 5	.	.	.	.	.	.	.	.	.
Zamak 6	.	.	.	.	.	.	.	.	.
43X Z3M	.	0.0092	.	.	.	0.0029	.	.	0.00259
BCR 360	.	.	.	0.00298	.	.	.	.	.
43X Z2N	0.0027	.	.	.	.	0.0062	(0.0007)	0.0008	.
SRM 630	.	.	.	.	.	0.022	.	.	.
ERM-EB602	.	.	.	.	.	0.00114	0.00048	.	.
BCR 361	.	.	.	(<0.00002)	.	.	.	.	0.00374
43X Z1K	.	0.0015	.	.	.	0.0007	.	.	.
SRM 628	.	.	.	.	.	.	0.008	.	.
BCR 357	.	.	.	0.000330	.	.	.	.	0.000276
43X Z1J	.	0.0031	.	.	.	0.0016	(0.0037)	0.0014	.
Zamak 3	.	.	.	.	.	.	.	.	.
Zamak 7	.	.	.	.	.	.	.	.	.
BCR 356	.	.	.	<0.00002	.	.	.	.	0.000079
42X Z6B	.	.	(0.012)	0.00191	(0.011)	0.0169	(0.010)	.	0.0021
42X Z12A	.	.	0.0116	0.0068	0.0084	0.0070	.	.	0.0076
42X Z3J	.	.	0.0032	.	0.0013	0.0006	(0.0018)	.	.
SRM 627	.	.	.	.	.	.	0.021	.	.
42X Z5M	.	.	0.0328	.	0.0026	.	.	0.0017	.
BCR 355	.	.	.	0.00246	.	.	.	.	0.002325
42X Z4J	.	.	0.020	0.0016	0.020	(0.0029)	.	.	(0.0025)
SRM 626	.	.	.	.	.	.	0.042	.	.
SRM 625	.	.	.	.	.	.	0.017	.	.
BCR 354	.	.	.	0.00098	.	.	.	.	0.001101
42X Z2K	.	.	0.0055	0.0047	0.0150	0.0010	0.0011	.	.
BCR 353	.	.	.	0.000255	.	.	.	.	0.000395
42X Z1J	.	.	0.0011	.	(0.0008)	0.0011	(0.0018)	.	.
BCR 352	.	.	.	0.000302	.	.	.	.	0.00032
BCR 351	.	.	.	<0.00002	.	.	.	.	0.000074
Zamak 8	.	.	.	.	.	.	<0.03	.	.
43X Z14E	.	0.0096	.	.	.	0.0089	0.016	0.0014	.

last of stock

CRM ZAMAK SET

SOLD IN SET/4 ONLY

40 mm Ø x 25 mm

Number	Al	Cd	Cu	Fe	Mg	Ni	Pb	Si	Sn
IMN ZG 1	3.07	0.00048	1.34	0.0083	0.074	0.0067	0.009	0.036	0.0068
IMN ZG 2	3.56	0.0049	0.72	.	0.048	0.0025	0.0065	0.024	0.0048
IMN ZG 3	4	0.0028	0.11	0.011	0.028	0.001	0.0033	0.01	0.00067
IMN ZG 4	4.64	0.011	(0.0089)	0.016	0.00055	0.00042	0.0013	(0.0047)	0.0021

ZINC BINARY AND TERNARY SAMPLES

= class, where 1 = CRM and 2 = RM analysis listed in mass % cast

#	Number	Al	Mg	Mn	Pb	Sb	Units
1	SRM 1742	0.7917	.	.	(0.0029)	.	50 mm Ø x 12 mm
1	SRM 1741	0.5242	.	.	0.1571	.	50 mm Ø x 12 mm
1	SRM 1740	0.4177	.	.	0.0691	.	50 mm Ø x 12 mm
1	SRM 1739	0.2049	.	.	0.0302	.	50 mm Ø x 12 mm
1	SRM 1738	0.1014	.	.	0.0101	.	50 mm Ø x 12 mm
2	41X ZMg1A	.	1.13	.	.	.	40 mm Ø x 15 mm
2	41X ZMg3A	.	2.80	.	.	.	40 mm Ø x 15 mm
1	41X ZMn1A	.	.	1.07	.	.	50 mm Ø x 20 mm
2	41X ZSb1A	.	.	.	.	1.03	40 mm Ø x 15 mm
2	41X ZSb4A	.	.	.	.	3.78	40 mm Ø x 15 mm
2	41X ZSb8A	.	.	.	.	7.68	40 mm Ø x 15 mm

RM**ZINC - ALUMINUM - ANTIMONY ALLOYS**

cast some Sb segregation in below series, last of stock 40 mm Ø x 15 mm

Number	Al	Sb	Bi	Cd	Cu	Fe	Mg	Pb	Sn
44X Z5A	20.4	5.2	0.004	0.001	0.001	0.010	<0.001	0.010	0.003
44X Z4A	20.3	6.7	0.016	0.011	0.007	0.011	0.008	0.032	0.018

CRM**ZINC ALLOY SETS**

available in SETS ONLY, as grouped

~40 mm Ø x ~25 mm

Number	Al	Bi	Cd	Cu	Fe	Mg	Mn	Ni	Pb	Sb	Sn	Ti	Zn
IMN ZK 1	11.789	0.200	0.0021	1.538	.	0.0009	.	.	0.0031	0.127	0.00085	.	.
IMN ZK 2	10.572	0.169	0.0031	3.119	.	0.0040	0.0137	.	0.0121	0.102	0.0015	.	.
IMN ZK 3	9.767	0.102	0.0071	3.996	.	0.0307	.	.	0.0226	0.0674	0.00267	.	.
IMN ZK 4	8.371	0.0188	0.0121	5.487	.	0.0640	.	.	0.0334	0.0121	0.00491	.	.
IMN ZK 5	6.476	0.0020	0.0207	6.663	.	0.0410	0.589	.	0.0507	0.0025	0.0065	.	.
IMN ZF 1	0.018	.	0.0041	0.013	0.020	.	.	.	0.0012	.	0.013	0.0014	Rem
IMN ZF 2	0.011	.	0.0055	0.46	0.011	.	.	.	0.0082	.	0.0077	0.11	Rem
IMN ZF 3	0.0033	.	.	0.098	0.0018	.	.	.	.	.	0.0022	0.021	Rem
IMN ZF 4	0.0058	.	0.00053	0.86	0.00045	.	.	.	0.0091	.	0.0017	0.20	Rem
IMN ZF 5	.	.	0.0088	0.011	0.0081	.	.	.	0.026	.	.	0.013	Rem

CRM

ZINC ALLOYS, chart 1 of 2

X: -50 mm Ø x -15-20 mm

CAN: 50 mm Ø x 12 mm

SRM: 44 mm x 44 mm x 19 mm

Number	Al	Bi	Cd	Cr	Cu	Fe	Mg	Mn	Ni	Pb	Sb	Si	Sn	Ti
43X Z23E	30.7	.	0.0042	0.0147	3.22	0.055	0.0242	0.0090	0.0236	0.0112	.	0.077	0.0115	0.0045
CAN NZA-1	28.70	.	0.00098	.	1.51	0.046	0.020	.	.	0.0030	.	.	0.0069	.
43X Z22D	27.4	.	0.0043	0.0010	2.11	0.068	0.0099	0.0057	0.0101	0.0053	.	0.019	0.0020	0.0073
CAN NZA-4	26.65	.	0.0029	.	2.45	0.027	0.0106	.	.	0.0101	.	.	0.0087	.
CAN NZA-3	25.99	.	0.0064	.	2.00	0.066	0.0049	.	.	0.0045	.	.	0.0034	.
43X Z21D	23.9	.	0.0010	.	2.68	0.0067	0.0142	0.0022	0.0021	0.0087	.	0.0191	0.0007	.
CAN NZA-2	23.81	.	0.0047	.	3.00	0.021	0.029	.	.	0.0076	.	.	0.0045	.
43X GALF5A	15.03	.	0.0080	.	0.0114	(0.072)	0.0016	.	.	0.0084	.	.	0.0081	.
CAN NZA-7	13.17	.	0.00020	.	0.212	(0.016)	0.052	.	.	0.0136	.	.	0.0116	.
42X Z16A	12.28	.	0.0045	0.0007	0.235	0.033	0.105	0.0028	0.0039	0.0090	.	0.011	0.0034	.
43X Z11F	11.12	0.0046	0.0175	(0.0003)	0.335	0.015	0.0357	0.0032	0.0014	0.0202	0.0009	0.0013	0.0145	.
CAN NZA-5	10.85	.	0.0095	.	1.04	(0.016)	0.021	.	.	0.0012	.	.	0.0017	.
43X GALF4A	10.71	.	0.0108	.	2.470	0.074	0.0062	.	.	0.0122	.	.	0.0110	.
43X Z12E	10.38	0.0021	0.0045	0.0008	0.791	0.037	0.0287	0.0026	0.0033	0.0041	0.0032	(0.002)	0.0017	0.0050
42X Z15A	9.99	.	0.0023	0.0003	0.0028	0.026	0.0026	0.0037	0.0017	0.0074	0.0006	.	0.0006	.
43X Z13E	9.01	0.0014	0.0072	0.0004	1.113	0.0045	0.0198	0.0025	0.0036	0.0086	0.0020	(0.0012)	0.0035	.
43X GALF3A	8.37	.	0.0018	.	0.507	0.018	0.0099	.	.	0.0032	.	.	0.0025	.
CAN NZA-6	7.54	.	0.0147	.	3.17	(0.0105)	0.00037	.	.	0.0089	.	.	0.0051	.
43X Z15C	7.36	(0.005)	0.0030	0.0024	1.54	.	0.0022	0.0020	0.0019	0.0060	(0.005)	(0.007)	0.004	0.002
42X Z8A	7.03	.	0.0003	(0.0002)	0.0215	.	0.0033	0.0014	0.0019	0.0025	.	0.013	(0.0023)	(0.0001)
42X Z9A	5.58	.	0.0054	.	0.0070	.	0.0464	0.0006	(0.0003)	0.0021	.	(0.004)	(0.00035)	0.020
43X GALF2A	5.40	.	0.0043	.	0.0585	0.032	0.0504	.	.	0.0050	.	.	0.0040	.
SRM 629	5.15	.	0.0155	0.0008	1.50	0.017	0.094	0.0017	0.0075	0.0135	.	0.078	0.012	.
43X GALF1A	4.68	.	0.0499	.	4.39	0.061	0.0999	.	.	0.0505	.	.	0.0514	.
42X Z7B	4.39	.	0.030	(0.0001)	0.0249	0.027	0.0095	0.0045	0.0067	0.0097	.	0.006	0.012	.
42X Z7C	4.39	.	0.030	(0.0001)	0.0249	0.027	0.0095	0.0045	0.0067	0.0097	.	0.006	0.012	(0.0001)
43X SC4A	4.35	.	0.0058	0.009	1.122	0.022	0.093	0.044	0.0249	0.0064	.	0.022	0.0056	.
43X Z10A	3.99	.	0.0014	0.00027	2.97	0.007	0.0403	0.0050	0.0036	0.0046	.	0.009	0.0012	.
43X SC1A	3.75	.	0.0011	0.0082	1.903	0.073	0.740	0.0201	0.0161	0.0150	.	0.022	0.0082	.
43X SC2A	3.41	.	0.0018	0.023	4.80	0.046	0.498	0.0183	0.0096	0.0097	.	0.0133	0.0031	.
42X Z11A	3.19	.	0.0020	0.0016	0.093	(0.036)	0.0329	0.0196	0.0241	0.0058	0.0047	.	0.0017	.
43X Z9A	3.17	0.0033	0.0034	0.0034	4.82	0.073	0.0472	0.0108	0.0027	0.0078	0.0033	.	0.0020	0.0012
43X Z5B	3.164	0.0148	0.0030	.	5.92	0.10	0.0144	0.0061	0.0056	0.0029	0.065	.	(0.0004)	.
43X SC3A	3.14	.	0.0028	0.0108	3.03	0.018	0.257	0.0337	0.0261	0.0066	.	0.022	0.0078	.
43X Z8A	2.51	.	0.00090	0.00024	0.481	(0.0017)	0.00155	0.00021	0.00033	0.0027	.	.	(0.0005)	.
41X 0336 Zn2M	1.55	0.0099	0.145	.	0.354	(0.01)	0.099	0.0212	0.0137	0.486	0.0007	.	0.038	.

Number	Ag	As	Be	Ce	In	La	Tl	Zr
43X Z23E	.	.	.	.	.	.	.	.
CAN NZA-1	.	.	.	.	.	.	.	.
43X Z22D	.	.	.	.	.	.	.	.
CAN NZA-4	.	.	.	.	.	.	.	.
CAN NZA-3	.	.	.	.	.	.	.	.
43X Z21D	.	(0.0004)	.	.	.	.	.	.
CAN NZA-2	.	.	.	.	.	.	.	.
43X GALF5A	.	.	.	0.0041	.	0.0019	.	.
CAN NZA-7	.	.	.	.	.	.	.	.
42X Z16A	.	.	.	.	0.0051	.	(0.003)	.
43X Z11F	.	.	.	.	.	.	.	.
CAN NZA-5	.	.	.	.	.	.	.	.
43X GALF4A	.	.	.	0.079	.	0.041	.	.
43X Z12E	.	.	.	.	.	.	.	.
42X Z15A	.	.	.	.	0.0024	.	.	.
43X Z13E	.	.	.	.	.	.	.	.
43X GALF3A	.	.	.	0.0152	.	0.0076	.	.
CAN NZA-6	.	.	.	.	.	.	.	.
43X Z15C	.	.	.	.	.	.	.	.
42X Z8A	.	.	.	0.0081	.	0.0079	.	.
42X Z9A	.	.	.	0.0047	.	0.0044	.	0.011
43X GALF2A	.	.	.	0.0318	.	0.0158	.	.
SRM 629	.	.	.	.	.	.	.	.
43X GALF1A	.	.	.	0.0569	.	0.0284	.	.
42X Z7B	.	.	.	0.072	.	0.061	.	.
42X Z7C	.	.	.	0.09	.	0.08	.	.
43X SC4A	.	.	.	.	.	.	.	.
43X Z10A	.	.	.	.	.	.	.	.
43X ZSC1A	.	.	.	.	.	.	.	.
43X SC2A	.	.	.	.	.	.	.	.
42X Z11A	.	.	.	0.0014	0.0037	(0.0009)	0.0047	.
43X Z9A	.	.	0.0010	.	.	.	.	.
43X Z5B	0.0254	(0.0005)	.	.	.	.	.	.
43X ZSC3A	.	.	.	.	.	.	.	.
43X Z8	.	.	.	.	.	.	.	.
41X 0336 Zn2M	0.0102	0.0009	.	.	.	.	0.0012	.

Number	Ag	As	Be	Ce	In	La	Tl	Zr
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CRM **ZINC ALLOYS, chart 2 of 2** 41X CGL: 42 - 48 mm Ø x 20 mm other X: ~50 mm Ø x ~20 mm

Number	Al	Bi	Cd	Cr	Cu	Fe	Mg	Mn	Ni	Pb	Sb	Si	Sn	Ti
41X GLV10A	0.969	0.0031	0.0030	.	0.0073	0.0051	0.0040	0.0062	0.0022	0.0066	0.0009	.	0.0062	.
41X GLV9A	0.547	0.0019	0.0028	.	0.0037	0.0039	0.0014	0.0027	0.0009	0.0043	0.0048	.	0.0028	.
41X GLV4C	0.514	0.0061	0.0006	0.0007	0.0321	0.0028	0.0034	0.0089	0.0441	0.0062	0.0287	.	0.0024	.
41X GLV4D	0.503	0.0047	0.0013	0.00104	0.0246	0.008	0.0025	0.164	0.0078	0.0058	0.0235	.	0.0035	.
41X GLV6A	0.474	0.0248	0.0053	0.0029	0.039	.	.	0.0013	0.0008	0.120	0.0112	.	0.0152	.
41X GLV11A	0.463	0.0009	0.0010	.	0.0017	0.0027	0.0009	0.0008	0.0008	0.0057	0.168	.	0.0009	.
41X 4380 Zn4D	0.446	0.0101	0.086	0.0029	0.0284	0.017	0.118	0.0092	0.0172	0.310	0.0156	.	0.0416	(0.0003)
41X GLV7A	0.399	(0.0108)	0.00056	0.0010	0.023	.	.	0.0025	0.0060	0.082	0.0031	.	(0.0006)	.
41X 0336 Zn3K	0.336	.	0.341	.	0.353	0.0456	0.147	0.0106	0.0022	0.0282	.	.	0.127	.
41X GLV3B	0.334	0.0016	0.0188	0.00084	0.0260	0.0031	0.00145	0.0111	0.0300	0.0091	0.058	.	0.0060	.
41X 4380 Zn9A	0.295	0.00046	0.0032	0.0015	0.0416	0.0113	0.0153	0.0018	0.0009	0.0139	0.0060	.	0.0008	.
41X CGLF	0.28	.	(0.0015)	.	(0.0005)	.	.	.	.	0.046	.	.	(<0.001)	.
41X 4380 Zn7D	0.277	.	0.0156	.	0.0133	0.0018	0.0029	0.0036	0.0120	1.18	0.086	.	0.0036	0.0065
41X GLV8A	0.263	0.0005	0.0003	0.0012	0.0139	0.0062	0.0012	0.0012	0.0006	0.0037	0.0057	.	0.0005	.
41X GLV8B	0.258	0.0006	0.0004	(0.0001)	0.0111	0.0080	0.0009	0.0035	0.0023	0.0039	0.0062	.	0.0005	.
41X 4380 Zn8D	0.232	0.0156	0.0097	(0.0001)	0.0208	0.0074	0.0054	0.0081	0.0445	0.700	0.0151	.	0.0177	0.0020
41X GLV1D	0.202	0.0040	0.0100	.	0.0169	0.021	0.0008	.	0.0019	0.0224	0.0010	.	0.0134	.
41X GLV2B	0.111	0.0172	0.0037	0.014	0.0050	0.143	0.0006	(0.033)	0.0145	0.259	0.0071	.	0.0148	.
41X 2951 Zn3A	0.078	.	0.0062	0.184	1.89	.	0.0164	0.0018	0.0010	0.0065	.	.	(0.006)	0.133
41X GLV2A	0.068	0.017	0.0025	.	0.0052	0.048	.	.	0.0070	0.214	0.006	.	0.003	.
41X ZNiBiA	0.050	0.502	0.0020	.	0.0132	0.0133	.	.	2.02	0.0187	.	.	0.154	.
41X 4380 Zn1D	0.039	0.0021	0.394	0.0007	0.178	0.0276	0.0032	0.0006	0.0058	0.0618	0.0019	.	0.0510	0.0004
41X 0336 Zn5A	0.035	(0.001)	0.056	.	0.023	.	<0.0005	(0.0001)	(0.0005)	0.91	0.008	.	0.21	.
41X 2951 Zn2A	0.032	.	0.0037	0.142	1.37	.	0.0123	0.0011	0.0027	0.0040	.	.	(0.0015)	0.209
41X 2951 Zn1A	0.029	.	0.0005	0.083	0.79	.	0.0029	0.0013	0.0038	0.0042	.	.	(0.0007)	0.278
41X 4380 Zn6D	0.0260	0.0047	0.0466	0.0064	0.0327	0.0307	0.0044	0.200	0.0073	0.427	(0.002)	.	0.101	0.0029
41X 4380 Zn5C	0.0215	0.0308	0.0571	0.0075	0.071	.	0.00165	0.035	0.00147	0.140	0.0061	.	0.0101	0.339
41X 4380 Zn3C	0.0203	0.0103	0.0950	0.0029	0.073	.	0.0220	0.0180	0.0120	0.180	0.0046	.	0.080	0.125
41X 0336 Zn1L	0.0177	.	0.0067	.	0.0088	0.0106	0.0062	0.0102	0.0009	1.007	.	.	0.0051	.
41X 4380 Zn2C	0.0153	0.0076	0.284	0.0027	0.0288	.	0.0243	0.0087	0.0023	0.268	0.0093	.	0.0021	0.0251
41X GLV5B	0.0139	0.0098	0.0136	.	0.0103	0.0443	0.0014	.	0.0025	0.0166	0.148	.	0.0172	.
41X ZNi2A	0.0135	0.0050	0.0010	.	0.0056	0.0061	.	.	1.97	0.0172	.	.	0.141	.
41X 4380 Zn10A	0.0004	.	0.0007	0.117	0.0022	0.49	0.184	.	0.063	0.0043	0.0005	.	0.0014	.
44X ZnCd30A	.	0.051	31.0	.	0.046	0.0015	.	.	0.0014	0.089	1.03	.	0.053	.

Number	Ag	As	Co	In	Tl
41X GLV10A	.	.	0.0002	.	.
41X GLV9A	.	.	0.0005	.	.
41X GLV4C	.	(0.0003)	0.0037	.	.
41X GLV4D	.	0.0002	0.0061	.	.
41X GLV6A	.	0.0014	0.0047	.	.
41X GLV11A	.	.	(0.0001)	.	Sr:(0.0004)
41X 4380 Zn4D	.	.	0.0018	.	.
41X GLV7A	.	0.0016	.	.	.
41X 0336 Zn3K	.	0.0003	.	.	.
41X GLV3B	.	(0.0007)	0.00150	.	.
41X 4380 Zn9A	.	.	.	.	.
41X CGLF	.	.	(<0.001)	(<0.001)	.
41X 4380 Zn7D	.	.	.	.	.
41X GLV8A	.	.	.	.	.
41X GLV8B	.	.	.	.	.
41X 4380 Zn8D	0.0140	.	.	.	.
41X GLV1D	.	0.0002	0.0003	.	.
41X GLV2B	.	0.0035	0.0024	.	.
41X 2951 Zn3A	.	.	.	.	.
41X GLV2A	.	<0.001	.	.	last of stock
41X ZNiBiA	.	.	.	.	.
41X 4380 Zn1D	0.0012	.	.	.	.
41X 0336 Zn5A	.	.	.	.	.
41X 2951 Zn2A	.	.	.	.	.
41X 2951 Zn1A	.	.	.	.	.
41X 4380 Zn6D	0.0030	.	0.0091	.	.
41X 4380 Zn5C	.	.	.	.	.
41X 4380 Zn3C	.	.	.	.	.
41X 0336 Zn1L	.	0.0008	.	.	.
41X 4380 Zn2C	.	.	.	.	.
41X GLV5B	.	0.00044	0.0011	.	.
41X ZNi2A	.	.	.	.	.
41X 4380 Zn10A	.	.	.	.	.
44X ZnCd30A	0.046	.	.	.	.

These globally recognized standards have been used in national mints and precious metal mines across the world. They originate from the Rand Refinery Ltd. in South Africa.

All of these reference materials will be accompanied by a Certificate of Analysis indicating the values of all elements. The XRF standards are mounted in bakelite TSP with a 31 mm Diameter. Other diameters and sizes are available on request.

Please note that with precious metals, market fluctuations will affect pricing. Quoted prices will be extended for a 30-day period. Prepayment is necessary. Delivery in 8 - 12 weeks.

HIGH PURITY GOLD - three forms - certified Au, informational impurities

Number	Au	Impurities reported as found present	Available forms, which must be specified
RAN AuHP1	99.99(5)	Al Ag As Bi Cd Cr Cu	80 g optical emission disc, custom sizes available
RAN AuHP2	99.99	Fe Mg Mn Ni Pb Pd Pt	18 mm x 2 mm XRF disc, 1.5 mm diameter wire,
RAN AuHP3	99.9(7)	Rh Sb Se Ti Te Zn	250 mg or 500 mg globules

HIGH PURITY SILVER - three forms - certified Ag, informational impurities

Number	Ag	Impurities reported as found present	Available forms, which must be specified
RAN AgHP1	99.99(5)	Al Ag As Bi Cd Cr Cu	10 mm diameter disc ~ 1g,
RAN AgHP2	99.99	Fe Mg Mn Ni Pb Pd Pt	1.5 mm diameter wire,
RAN AgHP3	99.9(7)	Rh Sb Se Ti Te Zn	250 mg or 500 mg globules

REFINED GOLD GLOBULES

Number	Al	Ag	As	Bi	Cd	Co	Cr	Cu	Fe	Mg	Mn	Ni	Pd	Pb	Pt	Rh	Sb	Se	Te	Ti	Zn
RAN AuP1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
RAN AuP2	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
RAN AuP3	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
RAN AuP4	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
RAN AuP5	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
RAN AuP6	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150

These standards are units of 75 globules at 200 mg +/- 5 mg each. The concentration of each impurity can be custom added and certified. Otherwise the certified impurities fall within 20% of the following values.

JEWELRY - XRF DISCS

Number	Au	% Ag	% Cu
RAN AuA1	98	2	0
RAN AuA2	96	2	2
RAN AuA3	91	0	8.5
RAN AuA4	88	8	4
RAN AuA5	75	18	7
RAN AuA6	50	20	30
RAN AuA7	37	10	53

Gold, Silver, and Copper will be certified within 1% of the stated values. These standards are available individually or as a set of 7 standards. 11 possible trace elements are then reported as informational, custom added as impurities to the alloys. Certified values will be given for all elements including trace elements. The size is 18 mm Ø x 2 mm H discs mounted on a 31 mm Ø bakelite TSP.

The following elements may be customized in mg/kg

Bi Cd Fe Mn Pd Pt Pb Sb Se Te Zn

BULLION - XRF discs

Optical emission discs are 80 g custom sizes, XRF discs are 21.7 mm Ø x 2 mm H discs mounted on a 31 mm Ø bakelite TSP. RAN REFBull1 is produced from high purity gold, silver, and copper, and are available as 3 different standards:

Certified values for Au, Ag, and Cu

Certified values for Au, Ag, and Cu with 6 trace elements (*) including Pt and Pd

Certified values for Au, Ag, and Cu with 19 trace elements

Note that the Au and Ag values for RAN Bull1 are mass percent, while Cu and Pd are in mg/kg.

Au %	Ag %	Cu	Pd*
99.63	0.329	238	14

The 19 trace elements are all less than 10 mg/kg.

Pt* Sn Pb Sb Bi* Zn Rh* Ni* Cr Mn Fe* Ti Se Co Cd Ag Au Cu Pd

RAN materials are limited to AuHP1 and AgHP1 as of October 2013, until further notice. Our apologies for the inconvenience.

TERNARY ALLOYS - XRF discs

Number	Au %	Ag %	Cu
RAN TA1	98.0	1.5	0.5
RAN TA2	96.0	3.0	1.0
RAN TA3	95.0	2.5	2.5
RAN TA4	93.0	4.5	2.5
RAN TA5	90.0	4.0	6.0
RAN TA6	83.3	4.0	12.7
RAN TA7	81.7	7.2	11.1
RAN TA8	80.0	12.5	7.5
RAN TA9	58.3	8.0	33.7
RAN TA10	58.3	20.0	21.7
RAN TA11	58.3	30.0	11.7
RAN TA12	50.0	20.0	30.0
RAN TA13	37.5	2.0	60.5
RAN TA14	37.5	10.0	52.5
RAN TA15/01	37.5	16.0	46.5
Number	Au %	Ag %	Cu

These standards are available as a set of 15 standards. The concentrations of the 3 major elements and the 10 trace elements will be certified over the ranges specified. The concentrations of major elements Au, Ag, and Cu in each alloy will fall within 1% of the values specified. Values listed are the mean of the range. Concentrations of custom added trace elements will be included and certified over the range of 1 - 150 mg/kg. Standards can be produced to order on receipt of detailed requirements listing concentration ranges of the trace elements.

The size is 18 mm Ø x 2 mm H discs mounted on a 31 mm Ø bakelite TSP.

The following elements may be customized in mg/kg: Bi Fe Mn Ni
Pb Pd Pt Sb Sn Zn

RAN materials are limited to AuHP1 and AgHP1 as of October 2013, until further notice. Our apologies for the inconvenience.

REFINED SILVER GLOBULES

Number	Al	As	Au	Bi	Cd	Co	Cr	Cu	Fe	In	Mn	Ni	Pb	Pd	Pt	Rh	Sb	Se	Sn	Te	Ti	Zn
RAN AgP1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
RAN AgP2	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
RAN AgP3	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
RAN AgP4	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
RAN AgP5	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
RAN AgP6	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150
RAN AgP6	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200

These standards are units of 75 globules at 200 mg +/- 5 mg each. The concentration of each impurity can be custom added and certified. Otherwise the certified impurities fall within 20% of the following values.

SILVER ALLOYS - XRF only

Number	Ag %	Cu
RAN AgA1	97	3
RAN AgA2	94	6
RAN AgA3	91.5	8.5
RAN AgA4	80	20
RAN AgA5	60	40

These standards are available individually or as a set of 5 standards. These contain silver and copper in a variety of ranges with certified values for nine custom trace elements. The size is 18 mm Ø x 2 mm H discs mounted on a 31 mm Ø bakelite TSP.

The following elements may be customized in mg/kg

Au Pt Pd As Bi Cd Sb Ni Fe

HALLMARK - XRF only

Entirely customized, these are made to the customer specifications. Certified values will be given for Au, Ag, and Cu. Discs are 22 mm Ø x 2 mm H mounted on a 31 mm Ø bakelite TSP. Any desired mix of Au, Ag, or Cu may be supplied with a certificate of analysis. Chosen compositions do not need to use all three of the possible elements.