

6. Magnesium Base

Blocks/Discs

6.1 Residuals in Pure Magnesium		Al	Zn	Mn	Zr	Cu	Si	Fe	Ni	Ca	Sn	Pb	Ag	Be	Cd	Ce	La	P	Na	Size (mm)			
																				Ø	H		
CRM	61 X MgP1A **	0.014	...	0.0035	<0.0005	0.0008	0.005	0.027	...	<0.001	<0.002	<0.002	<0.0002	<0.0002	<0.0002	<0.001	<0.001	...	...	45 x 20	c
CRM	61 X MgP2A **	0.065	0.0122	0.0118	(0.0007)	0.0109	0.031	0.0061	0.0029	0.0138	0.0073	0.0061	0.003	<0.0001	0.0063	0.0019	0.0014	...	...	45 x 20	
CRM	61 X MgP3A **	0.096	0.0196	0.0137	(0.0014)	0.0292	0.044	0.014	0.0048	0.054	0.0155	0.0148	0.0125	<0.0001	0.0154	0.0055	0.0038	...	...	45 x 20	
CRM	61 X MgP4A **	0.0243	0.0158	0.0102	0.030	0.0109	0.039	(0.0044)	0.0028	0.028	0.0068	0.0069	0.021	<0.0001	0.0071	0.0043	0.0029	...	...	45 x 20	
Samples marked ** may be unsuitable for use with glow discharge analysis																							
	61 NH R0-90	0.0020	0.0037	0.0014	...	0.0006	0.0015	0.0098	0.0013	0.00005	...	0.0004	...	...	<0.00005	...	...	<0.0001	...	64 x 13	
	61 NH R1-88	0.0059	0.0003	0.0542	...	0.0013	0.0044	0.0251	0.0006	...	...	...	...	...	...	...	...	...	...	64 x 13	
	61 NH R2-88	0.0118	0.0011	0.0272	...	0.0028	0.0091	0.0294	0.0027	...	...	...	...	...	...	...	...	...	...	64 x 13	
	61 NH R3-88	0.0194	0.0153	0.0197	...	0.0067	0.0139	0.0298	0.0013	...	...	...	...	...	...	...	...	...	...	64 x 13	
	61 NH R4-88	0.0259	0.0271	0.0111	...	0.0098	0.0227	0.0359	0.0016	...	...	...	...	...	...	...	...	...	...	64 x 13	
	61 NH R5-88	0.0473	0.0520	0.0061	...	0.0150	0.0362	0.0274	0.0012	...	...	...	...	...	...	...	...	...	...	64 x 13	
	61 NH RMGH-88	0.0535	0.0112	0.0012	...	0.0055	0.0209	0.0222	0.0041	...	...	...	...	...	...	...	...	...	...	64 x 13	
	61 NH RMGL-88	0.0055	0.0073	0.0298	...	0.0008	0.0004	0.0031	0.0003	...	...	...	...	...	...	...	...	...	...	64 x 13	
	61 NH RMGL-93	<0.001	0.0013	0.0005	...	0.0012	0.0002	0.0032	0.0005	...	...	...	...	...	...	...	...	...	...	64 x 13	
	61 NH RTC-90	0.0055	0.0027	0.0702	...	0.0011	0.0013	0.0309	0.0012	0.0004	0.0000	0.0020	...	...	<0.0001	...	...	0.0027	0.0001	64 x 13	
	61 NH RT400-01	0.0161	0.0012	0.0191	...	0.0034	0.0084	0.0329	0.0012	0.0009	0.0018	0.0025	...	...	0.0007	...	...	0.0043	0.0028	64 x 13	
6.3 Mg/Mn		Al	Zn	Mn	Zr	Cu	Si	Fe	Ni	Ca	Sn	Pb	Ag	Be	Cd							Size (mm)	
																Ø	H						
CRM	63 X MgE1C **	0.40	0.033	0.76	(0.0013)	0.044	0.006	0.010	(0.002)	0.04	0.013	0.010	0.015	<0.0005	...	...	...	...	...	45 x 20	c
	63 X MgE2A	0.07	0.02	1.47	<0.002	0.02	0.01(5)	0.02	0.005	0.01	0.01	0.007	...	...	...	...	...	...	...	40 x 15	
CRM	63 X MgE3B	0.015	0.022	2.36	<0.001	0.012	0.01	0.004	0.0023	0.13	0.0057	0.005	0.005	...	0.001	...	...	...	...	40x15 or 50x20	
Samples marked ** may be unsuitable for use with glow discharge analysis																							
	63 NH K0-87	1.03	0.050	0.489	...	0.0022	0.0076	0.0043	0.0005	...	...	...	...	0.0005	...	...	...	...	...	64 x 13	
	63 NH M12-X-91	0.094	0.251	2.18	...	0.0271	0.0128	0.0015	0.0050	...	0.0457	0.0169	...	0.0003	...	...	...	...	...	64 x 13	
	63 CA SMD3A	0.08	0.058	1.69	...	0.032	0.034	...	0.002	...	...	...	...	...	...	...	...	...	...	60 X 6	
6.4 Mg/Al		Al	Zn	Mn	Cu	Si	Fe	Ni	Ca	Sn	Pb	Be	Cd	P	Na							Size (mm)	
																Ø	H						
	64 NH STD1-85	9.54	0.0009	0.0169	0.0130	1.14	0.0278	0.0127	...	...	...	0.0015	...	...	...	...	...	...	...	64 x 13	
	64 NH AM2002-91	1.99	0.088	0.440	0.0235	0.0831	0.0036	0.0011	...	...	...	0.0009	...	...	...	...	...	...	...	64 x 13	
	64 NH AM5002-91	4.92	0.054	0.189	0.0121	0.0722	0.0068	0.0022	...	...	...	0.0004	...	...	...	...	...	...	...	64 x 13	
	64 NH AM60-T-89	5.86	0.017	0.294	0.0013	...	0.0041	0.0007	<0.0001	0.0004	0.0010	...	<0.00005	0.0012	0.0004	...	...	...	...	64 x 13	
	64 NH A60-Y-91	5.45	0.070	0.193	0.0013	0.0167	0.0082	0.0005	...	...	...	0.0011	...	...	...	...	...	...	...	64 x 13	
	64 NH A60-T-00	5.98	0.084	0.37	0.0011	0.0148	0.0021	0.0009	...	0.0015	0.0016	0.0008	...	...	...	...	...	...	...	64 x 13	
6.5 Mg/Al/Zn		Al	Zn	Mn	Zr	Cu	Si	Fe	Ni	Ca	Sn	Pb	Ag	Be	Cd	Ce	La	Sr	Others	Size (mm)			
																				Ø	H		
	65 NH A8-H-98	9.89	2.04	0.074	...	0.0229	0.31	0.0179	0.0115	...	0.0100	0.0100	...	0.0020	...	...	...	...	...	64 x 13	
	65 NH A8-H-99	9.95	1.21	0.067	...	0.0118	0.091	0.0276	0.0109	...	...	...	...	0.0015	...	...	...	...	...	64 x 13	
	65 NH A8-L-98	2.62	0.10	0.50	...	0.0009	0.0070	0.0019	0.0012	...	0.0009	0.0016	...	0.0005	...	...	...	...	...	64 x 13	
	65 NH A8-L-02	4.73	0.206	0.43	...	0.0010	0.0040	0.0032	0.0003	...	0.0002	0.0009	...	0.0004	<0.0001	...	...	...	...	64 x 13	
	65 NH A91-T-00	9.06	0.76	0.203	...	0.0012	0.0095	0.0010	0.0008	...	0.0017	0.0013	...	0.0006	...	...	...	...	...	64 x 13	
	65 NH A91-L-00	6.98	0.19	0.53	...	0.0004	0.0021	0.0004	0.0002	...	0.0009	0.0005	...	0.0001	...	...	...	...	...	64 x 13	
	65 NH AZ61-H-91	7.45	1.466	0.040	...	0.0301	0.32	0.0140	0.0413	...	...	...	...	0.0048	...	...	...	...	...	64 x 13	
	65 NH AZ61-L-91	4.92	0.112	0.502	...	0.0020	0.027	0.0044	0.0038	...	...	...	...	0.0004	...	...	...	...	...	64 x 13	
	65 NH AZ61-T-91	6.23	0.82	0.243	...	0.0184	0.166	0.0088	0.0188	...	...	...	...	0.0013	...	...	...	...	...	64 x 13	
	65 NH AZ61-X-91	6.65	1.223	0.127	...	0.0245	0.243	0.0154	0.0331	...	...	...	...	0.0021	...	...	...	...	...	64 x 13	
	65 NH AZ61-Y-91	5.56	0.476	0.355	...	0.0116	0.087	0.0053	0.0107	...	...	...	...	0.0006	...	...	...	...	...	64 x 13	
	65 NH AZ63-89	6.05	3.71	0.164	...	0.0234	...	0.0082	0.0032	0.0002	0.0055	0.0052	...	0.0012	0.0054	...	...	...	P 0.0069	64 x 13	
	65 NH AZ63-X-90	6.33	3.21	0.160	...	0.0130	0.0616	0.0103	0.0016	...	0.0169	0.0182	...	0.0014	0.0192	...	...	...	...	64 x 13	
	65 NH A31-L-91	1.91	0.202	0.408	...	0.0037	0.020	0.0041	0.0007	...	...	...	...	0.0003	...	...	...	...	...	64 x 13	
	65 NH A31-T-91	3.06	1.098	0.256	...	0.0355	0.151	0.0103	0.0052	...	...	...	...	0.0017	...	...	...	...	...	64 x 13	
	65 NH A31-X-91	3.51	1.455	0.116	...	0.0475	0.263	0.0138	0.0071	...	...	...	...	0.0029	...	...	...	...	...	64 x 13	
	65 NH A31-Y-91	2.37	0.616	0.327	...	0.0124	0.0258	0.0073	0.0040	...	...	...	...	0.0007	...	...	...	...	...	64 x 13	
	65 NH A41-X-91	5.16	0.210	0.410	...	0.0173	0.924	0.0061	0.0029	...	...	...	...	0.0015	...	...	...	...	...	64 x 13	
	65 NH K2-87	6.14	0.32	0.165	...	0.0040	0.018	0.0129	0.0016	...	...	...	...	0.0012	...	...	...	...	...	64 x 13	
	65 NH K3-87	7.36	0.51	0.280	...	0.0084	0.030	0.0097	0.0028	...	...	...	...	0.0010	...	...	...	...	...	64 x 13	
	65 NH K5-87	8.11	1.07	0.351	...	0.0462	0.083	0.0009	0.0116	...	...	...	...	0.0001	...	...	...	...	...	64 x 13	
	65 NH K7-87	9.40	0.62	0.027	...	0.0047	0.046	0.0104	0.0017	...	...	...	...	0.0008	...	...	...	...	...	64 x 13	
	65 NH K8-87	10.32	0.73	0.190	...	0.0041	0.018	0.0127	0.0015	...	...	...	...	0.0007	...	...	...	...	...	64 x 13	
	65 NH APE-89	10.24	1.44	0.058	...	0.0298	0.086	0.0149	0.0055	0.0005	0.0062	0.0057	...	0.0018	0.0060	...	...	...	P 0.0063	64 x 13	
	65 NH LT500-01	9.28	0.86	0.32	...	0.0052	0.0162	0.0050	0.0019	...	0.0025	0.0024	...	0.0013	...	...	...	...	...	64 x 13	
	65 NH LT60-01	5.99	0.15	0.37	...	0.0034	0.0161	0.0059	0.0016	...	0.0020	0.0027	...	0.0014	...	...	...	...	...	64 x 13	

6. Magnesium Base

Blocks/Discs

6.5 Mg/Al/Zn (continued)		Al	Zn	Mn	Zr	Cu	Si	Fe	Ni	Ca	Sn	Pb	Ag	Be	Cd	Ce	La	Sr	Ti	Size (mm)		
																					Ø	H
CRM	65 X MgA1H **	3.83	1.40	0.20	...	0.148	0.17	(0.01)	0.008	0.008	0.090	0.016	...	0.00055	...	...	...	0.0007	...	...	45 x 20	c
CRM	65 X MgA1J **	5.45	1.26	0.060	(0.0015)	0.221	0.20	0.021	0.021	0.029	0.072	0.012	0.012	0.006	0.013	0.009	0.007	...	...	...	45 x 20	
CRM	65 X MgA2G **	7.31	0.97	0.139	...	0.112	0.15	0.011	(0.002)	(0.01)	0.049	0.007	...	0.0007	...	...	...	0.0005	...	...	45 x 20	
CRM	65 X MgA3H **	8.99	0.706	0.152	...	0.0061	0.047	0.004	(0.001)	<0.001	0.0026	0.004	...	0.0007	...	...	...	<0.0002	...	...	45 x 20	
CRM	65 X MgA4H **	11.67	0.0050	0.0062	...	0.061	0.025	0.0092	0.0036	0.033	0.0102	0.0040	0.0186	0.0011	...	...	...	...	...	...	45 x 20	
CRM	65 X MgA5A	8.01	0.411	0.399	...	0.020	0.110	0.006	0.020	0.012	0.013	0.043	0.0050	0.0013	0.0035	...	...	0.00034	...	...	40x15 or 50x20	
CRM	65 X MgA7A	9.38	0.66	0.285	(0.0008)	0.0010	0.006	0.0103	0.0009	...	<0.002	<0.002	<0.0005	...	...	...	...	0.015	...	...	40 x 17	
Samples marked ** may be unsuitable for use with glow discharge analysis																						
CRM	65 X MgB1C **	2.34	1.71	0.61	(0.001)	0.195	0.14	0.006	0.012	0.001	0.012	0.01	0.03	0.0006	0.07	0.010	0.010	...	...	...	45 x 20	c
CRM	65 X MgB1D **	2.39	1.71	0.68	(0.003)	0.20	0.17	0.016	0.013	0.41	0.011	0.015	0.029	0.0007	0.070	0.015	0.013	...	0.009	...	45 x 20	
	65 X MgB2B	3.38	0.90	0.34	<0.002	0.10	0.07	0.01(7)	0.006	...	0.01	0.01	...	...	...	...	...	...	...	...	40 x 15	
	65 X MgB3B **	3.19	0.608	0.0122	<0.001	0.0214	0.012	(0.004)	0.0020	0.030	0.0050	0.0037	(0.0024)	0.0029	0.012	...	...	...	...	...	45 x 20	
CRM	65 X MgB4C*	4.20	0.32	0.004	<0.01	0.05	0.04	0.01	<0.002	...	<0.002	<0.002	...	...	...	...	...	...	...	...	40 x 15	
* Target values		Samples marked ** may be unsuitable for use with glow discharge analysis																				
	65 CA C8209	2.55	0.18	0.15	...	0.012	0.058	(0.02)	0.001	...	...	...	...	...	...	...	...	...	...	...	60 X 6	

6.6 Mg/Zn		Al	Zn	Mn	Zr	Cu	Si	Fe	Ni	Ca	Sn	Pb	Ag	Be	Ce	La	Sr	Size (mm)				
																		Ø	H			
	66 X MgD2A	0.30	1.13	0.74	<0.01	0.08	0.07	0.014	0.008	<0.005	0.011	0.012	...	...	...	...	...	...	...	...	40 x 15	c
	66 X MgD3B **	0.041	1.97	0.28	0.029	0.058	0.020	0.023	0.002	(0.07)	0.007	0.009	0.005	0.0003	0.004	0.004	...	...	...	...	45 x 20	
CRM	66 X MgD4B	0.0012	2.77	0.0053	0.69	0.0041	<0.001	0.0010	...	...	...	...	...	<0.0002	0.015	0.014	...	...	...	...	40 x 15	
Samples marked ** may be unsuitable for use with glow discharge analysis																						
CRM	66 X MgC1B	<0.002	2.54	0.010	0.74	0.056	<0.005	(0.0014)	...	...	<0.002	0.010	0.006	<0.0002	...	...	...	...	...	...	40 x 15	c
CRM	66 X MgC2D	0.0008	4.49	0.0078	0.54	0.033	<0.001	0.0011	...	(0.0008)	0.0058	0.0031	<0.0002	...	...	...	...	...	...	...	40 x 15	
CRM	66 X MgC3B	0.011	4.97	0.020	0.13	0.009	(0.003)	(0.001)	0.006	...	<0.002	0.003	0.001	...	...	...	...	...	...	...	40 x 15	
CRM	66 X MgC4C	0.039	6.80	0.167	<0.001	0.0023	0.06	0.006	0.01	<0.001	0.021	0.003	0.0074	0.0001	...	...	0.0001	...	...	...	40x15 or 50x20	

6.7 Mg/Rare Earth		Al	Zn	Mn	Zr	Ce	La	Nd	Pr	Total R.E.	Cu	Si	Fe	Ni	Sn	Pb	Ag	Size (mm)				
																		Ø	H			
CRM	67 X MgF1B	0.0176	0.501	0.0039	0.022	1.88	1.12	(0.05)	0.48	...	0.0048	<0.005	0.0024	(0.0003)	<0.002	<0.001	<0.001	...	...	...	40 x 15	c
CRM	67 X MgF2B	0.0038	1.71	0.0047	0.30	1.42	0.98	0.29	0.112	...	0.0033	<0.002	(0.001)	0.0008	<0.002	0.019	<0.001	...	...	...	40 x 15	
CRM	67 X MgF3B	<0.001	3.34	0.0040	0.53	1.17	0.84	0.212	0.106	...	0.0010	(0.001)	<0.002	...	<0.002	0.0140	<0.001	...	...	...	40 x 15	
CRM	67 X MgF4B	0.079	5.04	0.0023	0.024	0.81	0.47	0.048	0.195	...	0.0302	(0.0014)	<0.002	...	<0.001	<0.001	<0.0005	...	...	...	40 x 15	
CRM	67 X MgF5B	0.094	6.29	0.171	<0.001	0.412	0.239	0.011	0.100	...	0.0735	0.0026	0.0290	0.0004	<0.001	<0.0005	<0.0005	...	...	...	40 x 15	
	67 NH AEL-93	1.45	0.053	0.161	...	0.79	0.37	0.25	0.09	...	0.0121	0.0172	0.0058	0.0025	...	...	...	...	...	...	64 x 13	
	67 NH AEH-93	4.96	0.40	0.30	...	2.29	0.90	0.61	0.28	...	0.0575	0.0376	0.0018	0.0084	...	...	...	...	...	...	64 x 13	
	67 CA C7489	0.001	...	0.012	0.46	2.57	...	...	...	(5.0)	0.004	0.002	...	0.015	...	...	...	...	...	...	60 x 6	c
	67 CA C7514	0.002	...	0.012	0.42	2.47	...	...	...	(4.7)	0.12	0.002	...	0.002	...	...	...	...	...	...	60 x 6	
	67 CA C7546	0.003	...	0.039	0.34	1.63	...	...	...	(3.0)	0.058	0.001	...	0.004	...	...	...	...	...	...	60 x 6	
	67 CA C7548	0.004	...	0.035	0.16	2.66	...	...	...	(4.8)	0.022	0.002	...	0.001	...	...	...	...	...	...	60 x 6	
	67 CA C7594	0.003	...	0.033	0.31	3.22	...	...	...	(6.0)	0.080	0.002	...	0.001	...	...	...	...	...	...	60 x 6	
	67 CA E1273	...	2.87	0.041	0.54	1.86	...	...	...	(3.6)	0.022	...	...	0.002	...	...	...	...	...	...	60 x 6	

6.8 Mg/Ag/Rare Earth		Al	Zn	Mn	Zr	Total R.E.	Ce	La	Nd	Pr	Th	Cu	Si	Fe	Ni	Ca	Sn	Pb	Ag	Size (mm)		
																				Ø	H	
CRM	68 X MgH1B	<0.002	0.053	0.0027	0.47	...	0.040	0.034	3.05	(0.014)	...	0.0046	<0.005	<0.002	(0.0006)	...	<0.002	<0.002	3.21	...	40 x 15	c
CRM	68 X MgH2B	<0.002	0.123	0.0038	0.46	...	0.055	0.044	2.70	(0.013)	...	0.0050	<0.002	(0.0006)	(0.0006)	...	<0.005	(0.0021)	2.94	...	40 x 15	
	68 X MgH3	<0.002	0.030	0.009	0.36	2.6	...	...	...	...	...	0.011	<0.005	0.002	0.001	0.007	<0.005	0.007	2.4	...	40 x 15	c
	68 X MgH6A	0.23	0.21	0.17	<0.01	(1.0)	...	...	...	...	...	0.11	0.01(5)	0.03	0.01	...	<0.002	<0.005	1.13	...	40 x 15	
The rare-earths in the above series were added as Neodymium rich R.E., but breakdowns of the individual R.E. values are not available.																						
	68 X MgL2	0.003	<0.002	0.008	0.54	1.02	...	...	...	...	0.69	0.012	<0.005	<0.001	<0.002	0.003	<0.005	<0.001	2.32	...	40 x 15	c
	68 X MgL3	0.003	<0.002	0.008	0.39	1.23	...	...	...	...	1.22	0.029	<0.005	0.002	<0.002	0.003	<0.005	<0.001	2.91	...	40 x 15	
	68 X MgL4	0.023	0.19	0.17	<0.005	1.33	...	...	...	...	1.32	0.049	0.01	0.017	0.012	0.006	0.009	<0.001	<0.005	...	40 x 15	
The rare-earths in the above series were added as Neodymium rich R.E., but breakdowns of the individual R.E. values are not available.																						

6.9 Mg/Y/Rare Earth		Al	Zn	Mn	Zr	Cu	Fe	Ni	Pb	Li	Y	Ce	La	Nd	Pr	Size (mm)						
																Ø	H					
CRM	69 X MgY1A	(0.0019)	0.121	0.0109	0.38	(0.0015)	0.0021	(0.0005)	0.014	0.119	4.64	0.029	0.166	2.26	0.059	40 x 17	
CRM	69 X MgY2A *	0.020	0.33	0.008	0.37	0.002	0.003	0.010	0.009	0.010	1.85	0.048	0.033	2.60	0.018	continued				40 x 17		
CRM	69 X MgY3A *	0.030	0.29	0.010	0.44	0.003	0.004	0.020	0.010	0.010	3.35	0.030	0.025	2.40	0.015					40 x 17		
* Target values																						
Continuation from above		Eu	Sm	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Typical Alloy Type				Size (mm)						
																Ø	H					
	69 X MgY1A	(0.004)	0.09	0.284	0.045	0.313	0.065	0.13	(0.013)	0.078	0.007	WE 43				40 x 17						
	69 X MgY2A	(0.001)	0.015	0.080	0.010	0.085	0.005	0.015	(0.004)	0.010	0.003					40 x 17						
	69 X MgY3A	(0.002)	0.022	0.21	0.005	0.23	0.01	0.035	(0.003)	0.015	0.001					40 x 17						