

INDUSTRIAL PROCESS/BYPRODUCTS				ALUMINIUM				ALUMINA												POWDER									
	Al2O3	Al	CaO	CaF2	Cr3O3	F	Fe2O3	Ga2O3	LiF	MgO	MnO	Na2O	P2O5	SO3	SiO2	TiO2	V2O5	ZnO	ZrO2	LOI	Others/Set Only	Size	Type	Origin					
051-X01-2	%		0.0006				0.012	0.014				0.45		0.043	0.007	0.0023	0.002	0.023				BET 13.5	100g	RM					
051-X03-1	%		0.0015				0.013	0.01				0.37		0.009	0.009	0.0032	0.002	0.0099		<0.1			100g	RM					
051-X09-4	%		0.02				0.0065	0.0001				<0.005		0.002	0.02	0.0005	<0.0004	<0.001				BET 14 GV 0.25	100g	RM					
051-X30-1	%		0.0048				0.028	0.0075				0.31		0.0004	0.037	0.0033	0.0006	0.003		0.08			100g	RM					
051-X12-1	%		0.028				0.019	0.01				0.43		0.0015	0.008	0.0045	0.0015						100g	RM	Fluid bed				
051-X16-1	%		0.0038				0.018	0.01				0.37		0.05	0.018	0.0062	0.0017	0.0007					100g	RM	Fluid bed				
240-ALU01	%		0.017				0.016	0.011				0.27	0.0005	0.12	0.013	0.004	0.002	0.001					1.2	100g	RM				
240-ALU02	%		0.009				0.017	0.011				0.25	0.0005	0.12	0.007	0.002	0.002	0.002					0.78	100g	RM				
240-ALU03	%		0.01				0.011	0.009				0.44		0.05	0.01	0.006	0.001	0.001					0.77	100g	RM				
240-ALU04	%		0.02				0.017	0.009				0.46		0.07	0.021	0.009	0.003	0.001					0.49	100g	RM				
240-ALU05	%		0.033				0.008	0.007				0.37		0.13	0.014	0.002	0.001	0.01					0.83	100g	RM				
240-ALU06	%		0.043				0.008	0.005				0.36		0.11	0.017	0.001	0.001	0.009					1.31	100g	RM				
240-ALU07	%		0.049				0.023	0.006				0.46		0.17	0.025	0.004	0.004	0.001					0.89	100g	RM				
240-ALU08	%		0.008				0.022	0.014				0.42		0.09	0.007	0.002	0.003	0.001					0.57	100g	RM				
240-ALU09	%		0.026				0.008	0.009				0.42	0.0002	0.08	0.018	0.001	0.001	0.001					0.6	100g	RM				
240-ALU10	%		0.004				0.015	0.013				0.37	0.0002	0.08	0.005	0.002	0.002						0.6	100g	RM				
SEE ALSO REFRACTORY AND MINERAL SECTIONS FOR OTHER SUITABLE REFERENCE MATERIALS																													
ALUMINIUM												ALUMINIUM FLUORIDE																	
	Al2O3	Al (tot)	Ca	CaF2	Cr	F	Fe	Ga	Li	Mg	Mn	Na	P	S	Si	Ti	V	Zn	Zr	Others/Set Only	Size	Type	Origin						
051-F01-3	%	4.5	33	0.12		61.3	0.03m				0.001		0.041m		0.07m	0.0014	0.0002	0.014				100g	RM						
240-CAA(AF)	%			0.26		60.4	0.056					1.16	0.0017	0.11	0.5							100g	RM						
240-CAB(AF)	%			0.24		57.2	0.056					1.01	0.0026	0.16	0.42							100g	RM						
240-CAC(AF)	%			0.024		61.8	0.049					0.92	0.0017	0.2	0.68							100g	RM						
240-CAN(AF)	%			0.16		62.4	0.018					0.22	0.009	0.23	0.1							100g	RM						
240-CAO(AF)	%			0.18		57.7	0.02					0.69	0.004		0.13							100g	RM						
ALUMINIUM												ELECTROLYTE BATH																	
	Al2O3	AlF3	Ca	CaF2	Cr	F	Fe	Ga	LiF	MgF2	Na	NaF									Others/Set Only	Size	Type	Origin					
240-BA01	%	7	12.4																						αAl2O3 1.5	100g	RM		
240-BA02	%	2.7	10.8																						αAl2O3 0.3	100g	RM		
240-BA03	%	4.1	0.9																						αAl2O3 <0.2	100g	RM		
240-BA04	%	5.5	6.4																						αAl2O3 3.2	100g	RM		
240-BA05	%	23.6	11.3																						αAl2O3 17.3	100g	RM		
240-BA06	%	23.3	12.2																						αAl2O3 16.7	100g	RM		
240-BA07	%	6.8	6.9																						αAl2O3 5.3	100g	RM		
240-BA08	%	7.3	3.2																						αAl2O3 4.6	100g	RM		
240-BA09	%	7.8	1.3																						αAl2O3 5.8	100g	RM		
240-BA10	%	6	5.2																						αAl2O3 4.9	100g	RM		
240-BA11	%	5.3	1.1																						αAl2O3 2.9	100g	RM		
240-BA12	%	4.2	3.8						2.72	0.21															αAl2O3 2.8	100g	RM		
240-BA13	%	4.2	0.6						2.47	0.24															αAl2O3 0.7	100g	RM		
240-BA14	%	3.3	1.4						2.04	3.4															αAl2O3 1.9	100g	RM		
240-BA15	%	6	5.7						0.95	0.28															αAl2O3 4.4	100g	RM		
240-BA16	%	4	3.7						3.08	0.22															αAl2O3 3.3	100g	RM		
240-BA17	%	5.1	0.6						2.61	0.16															αAl2O3 3.4	100g	RM		
051-M01	%	2.6	14.4n	2.9		53.9			0.72n	0.22n	25.8														NaF/AlF3 1.16 AIF3+ 6.4	100g	RM		
051-M02	%	2	13.1n	2.2		53.1			0.47n	0.17n	29.1														NaF/AlF3 1.42 AIF3+ 0.2	100g	RM		
051-M05-2	%	3.5	13.9n	1.3		52.8			0.63n	0.08n	29.3	1													NaF/AlF3 1.43	100g	RM		
051-M06-2	%	4.3	14.3n	1.4		52.4			0.75n	0.09n	28.5	0.4													NaF/AlF3 1.39	100g	RM		
051-M07-2	%	5.1	14.6n	1.8		52.1			0.71n	0.13n	28														NaF/AlF3 1.38 AIF3+ 0.3	100g	RM		
051-M08-2	%	2.7	13.7n	1.8		53.5			0.75n	0.15n	28.4														NaF/AlF3 1.36 AIF3+ 0.8	100g	RM		
051-M09-2	%	3.8	13.7n	0.79		52			0.85n		29	2.2															100g	RM	

INDUSTRIAL PROCESS/BYPRODUCTS				ALUMINIUM				RED MUD												POWDER						
	Al2O3	C(org)	CaO	CaF2	Cr2O3	F	Fe2O3	Ga	Li	MgO	Mn2O3	Na2O	P2O5	S	SiO2	TiO2	V2O5	ZnO	ZrO2	LOI	Others/Set Only	Size	Type	Origin		
051-R01-3	%	27.7		0.66		0.079	28.6			0.09	0.035	10	0.16		15.6	8	0.064	0.007	0.34	8.42		100g	RM			
051-R02-3	%	24.4		1.2		0.41	31.2			0.13	0.08	4.5	0.31		6.52	19.2	0.19	0.007	0.54	11.1		100g	RM			
051-R04-3	%	14		0.47		0.14	54.7			0.35	0.4	7.14	0.25		10.4	6.35	0.083	0.02	0.19	5.6		100g	RM			
051-R05-3	%	14.4		0.59		0.095	54.3			0.076	0.016	6.05	0.2		8.58	9.9	0.11		0.4	5.3		100g	RM			
051-R06-3	%	18.6		0.65		0.06	40.7			0.02	0.02	11.1	0.14		16.4	3.89	0.12	0.004	0.2	8.05		100g	RM			
240-CAN	%	27.9	0.23	13.5			4.7					8.5			16.5n	8.5				17.3		100g	RM			
240-RM01	%	16.8	0.36	3.5			53.8					1.4			5.4n	5.9				12		100g	RM			
240-RM02	%	13.9	0.16	11.2			30.7					3			6.2n	22.6				8.4		100g	RM			
240-RM03	%	13.3	0.28	8.3			49.2					1.4			4.6n	6.5				12.1		100g	RM			
240-RM04	%	20.6	0.43	7.7			29					6.8			13.9n	6				12.7		100g	RM			
240-RM05	%	21.9	0.22	0.9			35.6					8.3			15.7n	7.1				8.9		100g	RM			
				CATALYST				AUTO																		
	Al	Ba	Ca	Cd	Ce	Fe	La	Ni	Pb	Pd	Pr	Rh	Si	Zn	Zr	Others/Set Only				Size	Type	Origin				
331-2556	%	-40	-0.01	-0.1	-1	-0.8	-0.7		0.6228	326a	697.4a	51.2a	-0.2	-0.06	-0.03							70g	CRM	Used		
331-2557	%	-20	-0.29	-0.2	-0.0044	-1.3	-1.5	-0.07	-0.5	1.393	233a	1131a	135.1a	-18	-0.1	-0.03						70g	CRM	Used		
				CEMENT				PORTLAND CEMENT																		
	Al2O3	BaO	CaO	Cl	Cr2O3	F	Fe2O3	Ga2O3	K2O	MgO	Mn2O3	Na2O	P2O5	SO3	SiO2	SrO	TiO2	ZnO	ZrO2	LOI	Others/Set Only	Size	Type	Origin		
202-DC62101	%	5.26		63.45		-0.04	3.2		1.18	1.17		0.2	-0.12	2.13	21.17		0.23			1.82	Mn 0.032m H2O+ (0.33)	100g	CRM			
331-1880A	%	5.18		63.83	0.004	0.007	-0.06	2.18	0.92	1.72	0.127	0.19	0.22	3.25	20.31	0.083	0.25	0.005		1.32	CaO (free) (0.84)	5g (4)	CRM			
331-1881	%	4.19		58.67		0.09	4.68		1.17	2.62	0.26	0.04	0.09	3.65	22.25	0.11	0.23	0.01		2.01		15g	CRM			
331-1882A	%	39.14		39.29		0.113	14.67		0.051	0.51	0.06	0.021	0.07		4.01	0.024	1.786	0.004				5g (4)	CRM			
331-1883A	%	70.04		29.52		0.006	0.078		0.014	0.19	-0.003	0.3	-0.003		0.24	0.019	0.02			-0.35		5g (4)	CRM			
331-1884	%	3.31		64.01	0	-0.01	-0.03	3.3	0.51	2.32	0.11	0.13	0.12	1.67	23.19	0.048	0.16	-0.02		1.17		15g	CRM			
331-1885	%	3.68		62.14	-0.02	-0.01	-0.05	4.4	0.83	4.02	0.12	0.38	0.1	2.22	21.24	0.037	0.2	-0.03		0.74		15g	CRM			
331-1886	%	3.99		67.43	0	-0.01	-0.01	0.31		1.6	0.013	0.02	0.025	2.04	22.53	0.11	0.19	-0.01		1.73		15g	CRM			
331-1887	%	5.59		62.88	-0.007	-0.01	-0.11	2.16	1.27	1.26	0.072	0.1	0.075	4.61	19.98	0.07	0.27	-0.01		1.49		15g	CRM			
331-1888	%	5.35		63.78	-0.015	-0.01	-0.02	3.18	0.56	0.71	0.025	0.14	0.085	3.16	20.86	0.07	0.29	-0.01		1.79		15g	CRM			
331-1889	%	5.61		65.08	-0.002	-0.01	-0.04	2.67	0.32	1.38	0.24	0.11	0.15	2.68	20.44	0.2	0.21	-0.01		0.92		15g	CRM			
351-353	%	4		65		0.02	5		0.5	2	0.2	0.05	0.1	2	20	0.3	0.2					100g	CRM	S resistant		
351-354	%	5		70		0.005	0.3		0.1	0.4	0.05	0.1	0.1	2	22	0.1	0.05					100g	CRM			
351-372/1	%	5		65		0.01	3		0.8	1.5	0.1	0.1	0.1	3	20	0.05	0.3					100g	CRM			
				CEMENT				CLINKER																		
	Al2O3	BaO	CaO	Cl	Cr2O3	F	Fe2O3	Ga2O3	K2O	MgO	Mn2O3	Na2O	P2O5	SO3	SiO2	SrO	TiO2	ZnO	ZrO2	LOI	Others/Set Only	Size	Type	Origin		
331-8486	%	-4.7		-63.36					-0.42	-4.73	-0.1	-0.1	-0.06	-0.27	-22.48	-0.05	-0.25			-0.16		30g	CRM) For		
331-8487	%	-5.53		-67.2					-0.72	-1.48	-0.04	-0.14	-0.29	-0.88	-21.43	-0.11	-0.27			-0.17		30g	CRM) phase		
331-8488	%	-4.9		-66.5					-0.35	-0.98	-0.03	-0.11	-0.08	-0.31	-22.68	-0.13	-0.24			-0.21		30g	CRM) determination		
				COPPER				SLAG																		
	Ag	Co	Cu	Fe	Mo	Ni	S	V	Others/Set Only														Size	Type	Origin	
185-ZM6	%	0.0031	0.39	2.12	46.72	0.021	0.08	1.04	0.006															250g	CRM	Converter
				FLUX																						
	Al2O3	C	CaF2	CaO	FeO	K2O	MgO	MnO	Na2O	P	S	SiO2	Others/Set Only										Size	Type	Origin	
054-W6	%	3.06		7.7	12.7	1.3	1.54	38.4		0.075	0.009	38.8											100g	CRM	Fused welding	
054-W7	%	29.8		28.3	23.8	0.86	0.94	11.3	0.412	1.37	0.0116	0.0308	23.2											100g	CRM	Fused welding
054-W8	%	24.6	0.049	68.7	52.9	0.128n					0.013	0.02	2.06											100g	CRM	Electroslag
054-W10	%	0.156			55.6		0.38				0.0136	0.0043	0.133											100g	CRM	Limestone

INDUSTRIAL PROCESS/BYPRODUCTS					IRON/STEEL					SLAG										POWDER			
BASIC SLAG	Al2O3	C	Ca	Cr	F	Fe	FeO	K	Mg	Mn	Na	Ni	P	Pb	S	Si	Ti	V	Zn	Others/Set Only	Size	Type	Origin
054-W4	% 3.62		25.7m			22.9	24.6		17.8m	4.23m			0.265		0.036	16.8m	1.05m				100g	CRM	
222-804-1	% (0.42)n		36.88			11.92			0.88	1.48			7.67		0.127	2.59	0.152	0.46			100g	CRM	
222-805-1	% 0.326n		34.96			14.87			1.12	1.59			7.07		0.092	3.1	0.205	0.514			100g	CRM	
222-806-1	% 0.477n		32.97			17.89			1.82	4.6			0.982		0.11	5.48	0.302	0.288			100g	CRM	
BLAST FURNACE	Al2O3	C	CaO	Cr2O3	F	Fe	FeO	K2O	MgO	MnO	Na2O	Ni	P2O5	PbO	S	SiO2	TiO2	V2O5	Zn	Others/Set Only	Size	Type	Origin
054-W1	% 8.51		38.9					0.63		9.33	0.229					0.68	37.9				100g	CRM	
054-W2	% 7.42		44.1				1.88		0.5	2.79	0.92	0.42				1.94	37.7				100g	CRM	
054-W3	% 15.1		33.9							11.4	0.35					0.65	29	8.62	0.166		100g	CRM	
071-SL1	% 9.63		37.48				0.92	-0.51	12.27	-0.86	0.39				1.26	35.73	-0.38				200g	CRM	
131-7-1-008	% 8.4		42.1	<0.008		0.3		-0.52	6.1	0.73	-0.33		<0.02	<0.0007	-0.65	39.1	0.3		<0.004m	BaO (0.05) CdO <0.0001	75g	CRM	
131-7-1-009	% 9.2		42.6	<0.02		0.48		-0.19	1.1	0.6	-0.14		<0.05	<0.002	1.17	32.8	0.38		<0.008m	BaO (0.1) CdO <0.0001	75g	CRM	
131-7-1-010	% 7.94		31.2	<0.08		5.5		-0.59	0.73	3.4	-0.18		<0.2	<0.002	0.14	44	0.91		<0.007m	BaO <0.07 CdO <0.0002	75g	CRM	
131-7-1-011	% 24		29.4	<0.2		1.98		-0.04	17.5	1.97	-0.19		<0.04	<0.001	-0.03	21.9	-0.09		<0.06m	BaO <0.04 CdO <0.0002	75g	CRM	
131-7-1-012	% 45.2		0.57	<0.3		1.02		-0.02	-0.21	0.06	-0.52		<0.01	<0.001	-0.009	51.4	-0.09		<0.005m	BaO <0.006 CdO <0.0001	75g	CRM	
131-7-1-013	% 38.6		28.7	<0.04		1.12		-0.03	8	0.26	-0.04		<0.02	<0.0005	-0.03	20.3	0.78		<0.006m	BaO <0.02 CdO <0.0001	75g	CRM	
131-7-1-014	% 24		30.1	<0.06		1.27		-0.07	9.3	-0.3	-0.07		<0.02	<0.0006	-0.02	33.6	-0.07		<0.04m	BaO <0.02 CdO <0.0001	75g	CRM	
131-7-1-015	% 14.5		28	<0.06		1.7		-0.08	9.2	0.58	-0.1		<0.02	<0.006	-0.02	-44.6	-0.08		<0.003m	BaO <0.02 CdO <0.0001	75g	CRM	
201-271	% 4.75		43.92			1.56		0.42	5.08	0.61n	0.35		0.011n		0.54	41.31					100g	CRM	
201-272	% 4.79		43.85			0.93		0.42	5.25	0.61n	0.34		0.01n		0.54	41.68			0.05		100g	CRM	
201-273	% 7.1		43.4			1.1		0.67	1.96	0.88n	0.62		0.01n		0.58	42.4	0.25		0.003		100g	CRM	
201-274	% 5.24		43.35			3.37		0.45	4.68	0.63n	0.32		0.011n		0.57	38.95	0.2		0.002		100g	CRM	
201-275	% 4.72		44.29			0.55		1.01	5.19	0.6n	0.85		0.011n		0.37	41	0.16		0.002		100g	CRM	
201-276	% 1.05		38.62			25.1	22.07	0.004	5.75	4.87n	0.016		0.415n		0.076	10.95			0.01		100g	CRM	
201-277	% 1.63		35.68			23.64	21.68	0.02	6.38	4.02n	0.033		0.394n		0.066	16.31			0.012		100g	CRM	
201-278	% 1.51		51.69			12.3	10.97	0.012	3.3	4.43n	0.035		0.43n		0.136	17.45	0.2		0.004		100g	CRM	
202-HC18804	% 7.46		46.61				0.26		2.95	0.425					1.559	36.61	0.45				100g	CRM	
202-HC19807	% 16.15		24.87			1.43			8.53	0.456			0.005n		0.389	21.75	9.39	0.318			100g	CRM	
202-HC19806	% 1.16		0.57	1.4		38.48			0.29	8.7			0.0807n		0.15	11.8	25.28	19.03			60g	CRM	
202-HC13801	% 7.84		42.45			0.33	0.41		8.18	0.22			0.0074		0.53	36.92	0.39				100g	CRM	
202-HC13803	% 8.28		40.46			0.42	0.53		7.61	0.23			0.01			40.66	0.45				100g	CRM	
222-802-1	% 8.53n		30.62n	0.0053n		0.576		0.491n	2.87n	0.46n	0.236n		0.109n		0.714	15.16n	0.366n	0.028n	0.0025	F 0.243 B 0.0245	100g	CRM	
222-803-1	% 6.98n		30.93n			0.613			2.44n	0.552n			0.118n		0.767	17.01n	0.301n				100g	CRM	
222-878-1	% 8.45n		25.46n			0.6		1.07n	5.8n	0.99n	0.35n		0.013n		0.83	15.77n	0.37n			F 0.15	100g	CRM	
222-879-1	% 0.803	43.7	0.477	0.368	18.97			2.19	4.45			8.46		0.102	8.82	0.535	0.738			P2O5(A.S.) 7.59	100g	CRM	
321-N01	% 8.17		41.52				0.26	-0.5	7.13	0.66					-1.5	38.58	-0.27				100g	CRM	
351-381	% 0.67	49	0.33		13.3	3.69		1.03	3.16			0		0.19	8.78	0.35	0				100g	CRM	
361-100A	% 10.16	0.068	37.6			0.29		0.48	12.9	0.35	0.15				1.8	35.2	0.5				50g	RM	
361-SLAG1	% 18.5	0.07	30.2			0.28		0.36	11.01	1.11	0.2				1.8	36.7	0.42				50g	RM	
361-SLAG2	% 10.3	0.2	44.6			0.23		0.17	5.87	0.19	0.16				1.14	37	0.2				50g	RM	
361-SLAG3	% 12.9	0.03	37.3			0.25		0.81	8.3	1.72	0.26				0.81	37.44	0.63				50g	RM	
361-101/1	% 0.61	52.4			6.25		0.003	0.61	3.45	0.009		0.78		6.25	23.7	0.8					100g	RM	
361-101/2	% 0.92	47			15.16		0.006	8.12	4.76	0.031		0.7		0.23	16.8	0.77					100g	RM	
361-101/3	% 1.47	53.7			10.96		0.006	3.1	5.2	0.028		0.77		0.19	18.8	0.92					100g	RM	
361-101/4	% 0.87	51.9			13.37		0.007	4.6	4.7	0.023		0.8		0.15	16.5	1.21					100g	RM	
361-101/5	% 0.57	46			19.2		0.005	5.5	5.7	0.043		0.71		0.12	14.9	1.1					100g	RM	
391-902-1	% 14.2		45	(0.002)n		0.13		0.56n	2.8	0.07	0.19n	-0.004	(0.002)n		1.09	34.7	0.66			Cl (0.003)	100g	CRM	
391-904-1	% 13.4		-41	(0.011)n		0.38		0.23n	7.5	0.91	0.23n	-0.002	0.009n		0.73	33.8	0.84			Cl (0.002)	100g	CRM	

INDUSTRIAL PROCESS/BYPRODUCTS				IRON/STEEL				SLAG				POWDER													
STEELMAKING	Al2O3	C	CaO	Cr2O3	F	Fe	FeO	K2O	MgO	MnO	Na2O	Ni	P2O5	PbO	S	SiO2	TiO2	V2O5	Zn	Others/Set Only	Size	Type	Origin		
202-HC13817	%	7.6		35.68		12.13			24.36	1.24			0.67		0.07	13.72	0.47			Fe2O3 13.16	100g	CRM			
261-SM4	%	5.96		37.39	0.27	3.38	3.36		12.16	9.05			0.19		0.11	28.16	1.18	0.05			100g	CRM			
261-SM5	%	3.42		29.83	3.14	9.32	9.03		7.94	14.89			1.01	0.067	0.067	26.1	0.75	0.78			100g	CRM			
261-SM7	%	3.48		40.5	1.32	10.54	7.85		10.16	7.29			1.63		0.2	19.14	0.62	0.7			100g	CRM			
CONVERTER	Al2O3	C	CaO	Cr2O3	F	Fe	FeO	K2O	MgO	MnO	Na2O	Ni	P2O5	PbO	S	SiO2	TiO2	V2O5	Zn	Others/Set Only	Size	Type	Origin		
054-W5	%	1.24		48.9		17.36	2.74		2.62	5.11					0.195	16.1					100g	CRM			
FLUORINE	Al2O3	C	CaO	Cr2O3	F	Fe	FeO	K2O	MgO	MnO	Na2O	Ni	P2O5	PbO	S	SiO2	TiO2	V2O5	ZnO	Others/Set Only	Size	Type	Origin		
171-S10	%	0.54	0.022	20.3		34.4	0.1		0.3	0.03			0.002n			7.8	0.05	0.01		CaF2 70.7 CaO(tot) 50.8	100g	CRM	ESR		
171-S9	%	31.5	0.042	29.1		17.3	0.04		2.2	0.04			0.005n			1.4	0.05	0.11		CaF2 35.5 CaO(tot) 39	100g	CRM	ESR		
171-S11	%	2.85		60.01	0.17	-7.9	-0.2		4.7	0.12			<-0.005		0.3	26.8	0.95		<-0.01		100g	CRM	AOD		
201-EZP1	%	24.85		36.76		31.62			-0.85							2.61					100g	CRM			
201-EZP2	%	41.38		24.03		-0.89			16.89							5.81					100g	CRM			
201-EZP3	%	19.13		39.53		15.78			8.44							1.68					100g	CRM			
PHOSPHATE	Al2O3	C	CaO	Cr	F	Fe	FeO	K2O	MgO	MnO	Na2O	Ni	P2O5	Pb	S	SiO2	TiO2	V2O5	ZnO	Others/Set Only	Size	Type	Origin		
222-826-1	%	0.696n		46.48	0.182	-0.37		0.0278n			0.375n	-0.002	14.65	-0.005		8.96			5.030n	P2O5 (acid sol) 10.73	100g	CRM			
222-827-1	%			47.38									20.7			6.21				P2O5 (acid sol) 18.79	100g	CRM			
TITANIUM				SLAG				POWDER																	
	Al2O3	C	CaO	Cr2O3	F	Fe	Fe2O3	K2O	MgO	MnO	Na2O	Ni	P	Pb	S	SiO2	TiO2	V2O5		Others/Set Only	Size	Type	Origin		
031-57	%	1.23		0.16	0.16		11.8		0.98	1.76							85.4	0.39			100g	CRM	S Africa		
031-58	%	2.17		0.22			9.6		0.69	1.44							84.1	0.4			100g	CRM	S Africa		
054-8075-94	%	2.5		0.68	0.54		4.9		0.54	0.89			0.07				37.1	0.36			100g	CRM			
TITANIUM DIOXIDE				POWDER																					
	Al	As	Ca	Cr	Cu	Fe	FeO3	K2O	MgO	Mo	Nb	Ni	Pb	Sb	Si	Sn	Ta	V	Zn	Zr	Others/Set Only	Size	Type	Origin	
054-7011-93/58	%	0.00051		0.22a		0.0016			0.11a	0.16a	0.23a	0.00035	0.00011		0.002	0.7a		0.5a		0.3a		/Y	30g	CRM	
054-7011-93/59	%	0.00051	0.0001	0.0001	0.00021	0.00043			0.0001	0.00051	0.0005	0.00035	0.00011	0.00011	0.0012	0.00027	0.0005	0.0002		0.00048		/Y	30g	CRM	
054-7011-93/60	%	0.00051	0.0002	0.00021	0.00051	0.0008			0.0002	0.001	0.001	0.0005	0.00022	0.0002	0.00041	0.00051	0.001	0.00051		0.00101		/Y	30g	CRM	
054-7011-93/61	%	0.001	0.0005	0.00056	0.0011				0.0005	0.0021	0.002	0.001	0.0005	0.0005	0.00074	0.001	0.002	0.001		0.0021		/Y	30g	CRM	
054-7011-93/62	%	0.002	0.001	0.00102	0.0021	0.0059			0.001	0.0051	0.0051	0.002	0.001	0.0011	0.0026	0.002	0.005	0.002		0.0051		/Y	30g	CRM	
054-7011-93/63	%	0.0051	0.002	0.002	0.01	0.01			0.0051	0.01	0.025	0.0051	0.002	0.0021	0.0062	0.01	0.025	0.01		0.01		/Y	30g	CRM	
054-7011-93/64	%	0.0104		0.011	0.025	0.1			0.0101	0.021	0.051	0.0105	0.0052	0.0052	0.0098	0.0203	0.051	0.102		0.021		/Y	30g	CRM	
054-7011-93/65	%	0.0474		0.093	0.097	0.47			0.0482	0.061	0.0093	0.019	0.0094	0.015	0.053	0.048	0.008	0.494		0.099		/Y	30g	CRM	
POLYMERIC MATERIAL				TRACE ELEMENT				POWDER																	
	As	Br	Cd	Cl	Cr	Hg	Pb	S													Others/Set Only	Size	Type	Origin	
191-680	ppm	30.9	808	140.8	810	114.6	25.3	107.6	670													100g	CRM	Polyethylene	
191-681	ppm	3.93	98	21.7	92.9	17.7	4.5	13.8	78													100g	CRM	Polyethylene	
VARIOUS				WASTE				POWDER																	
	Ag	Al	As	Ba	Ca	Cd	Co	Cr	Cu	Fe	Ga	K	Mg	Mn	Na	Ni	Pb	Ti	V	Zn	Others/Set Only	Size	Type	Origin	
095-006-50	ppm	73.3		98.63	129	32.4		11.2		64.4		0.87t	59.6		123		753			73.7t		50g	CRM	Paint Sludge	
095-009-100	ppm	9	-890	-50	-1100			50	1.21t			-640	-150		(1.8)t	343	1.42t			-40		100g	CRM	Plating Sludge	
095-010-100	ppm	56	693	173	563			80	6.32t	2699			-80	18	(1.6)t	194	11.9t			183		100g	CRM	Plating Sludge	
095-011-100	ppm	-1	-20	-5	-180			5.92t	108	-4700		(4.9)t	-50		(2.3)t	4.19t	269					100g	CRM	Plating Sludge	
095-013-50	ppm		-1200	-1200	-1150	38		618	-30	-1400		-170	-430		-310	-10	643			-2370		50g	CRM	Paint Chips	
321-GI	%	0.3		0.03	-6.4	0.001	0.002	-3.8	(6.4)m			0.14	0.14	0.14	0.7	-2.7	0.63			-2.1	Sr 0.033	70g	CRM	Zn plating	
331-2782	%	30.6a	1.37	0.0166	0.0254	0.67		0.0066	0.0909	0.2594	26.9	0.9035	0.32	-0.03	-0.03	1.3	0.0154	0.0574	0.088	0.008	0.1254	C (2.1) Si (20.3) P 0.5	70g	CRM	Industrial