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# Étalons, MRC, Acides, Réactifs Promotion début 2023



analytika<sup>®</sup>, spol. s r.o.

**Certified reference materials ASTASOL® (1000 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN90011N	Ag	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90021C	Al	1000 ± 2	5% HCl	39	48	54	87	109
AN90021N	Al	1000 ± 2	5% HNO <sub>3</sub>	35	45	49	82	106
AN90031N	As	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90041C	Au	1000 ± 2	5% HCl	53	86	106	143	188
AN90051H	B	1000 ± 2	H <sub>2</sub> O	35	45	49	82	106
AN90061C	Ba	1000 ± 2	2% HCl	39	48	54	87	109
AN90061N	Ba	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90071N	Be	1000 ± 2	2% HNO <sub>3</sub>	49	67	78	125	212
AN90081N	Bi	1000 ± 2	5% HNO <sub>3</sub>	35	45	49	82	106
AN90091C	Ca	1000 ± 2	2% HCl	39	48	54	87	109
AN90091N	Ca	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90101C	Cd	1000 ± 2	2% HCl	39	48	54	87	109
AN90101N	Cd	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90111N	Ce	1000 ± 2	5% HNO <sub>3</sub>	39	48	54	87	109
AN90121C	Co	1000 ± 2	2% HCl	35	45	49	82	106
AN90121N	Co	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90131C	Cr	1000 ± 2	2% HCl	39	48	54	87	109
AN90131N	Cr	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90141H	Cs	1000 ± 2	H <sub>2</sub> O	41	49	60	93	123
AN90141N	Cs	1000 ± 2	2% HNO <sub>3</sub>	41	49	60	93	123
AN90151C	Cu	1000 ± 2	2% HCl	39	48	54	87	109
AN90151N	Cu	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90161N	Dy	1000 ± 2	2% HNO <sub>3</sub>	41	49	60	93	123
AN90171N	Er	1000 ± 2	2% HNO <sub>3</sub>	41	49	60	93	123
AN90181N	Eu	1000 ± 2	2% HNO <sub>3</sub>	41	49	60	93	123
AN90191C	Fe	1000 ± 2	5% HCl	39	48	54	87	109
AN90191N	Fe	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90201N	Ga	1000 ± 2	2% HNO <sub>3</sub>	41	49	60	93	123
AN90211N	Gd	1000 ± 2	2% HNO <sub>3</sub>	41	49	60	93	123
AN90221FN	Ge	1000 ± 2	1% HF + 5% HNO <sub>3</sub>	41	49	60	93	123
AN90231FN	Hf	1000 ± 2	1% HF + 5% HNO <sub>3</sub>	52	83	103	143	204
AN90241N	Hg	1000 ± 2	5% HNO <sub>3</sub>	35	45	49	82	106
AN90251N	Ho	1000 ± 2	2% HNO <sub>3</sub>	46	61	72	109	180
AN90261N	In	1000 ± 2	2% HNO <sub>3</sub>	41	49	60	93	123
AN90271C	Ir	1000 ± 5	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.

**Certified reference materials ASTASOL® (1000 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN90281H	K	1000 ± 2	H <sub>2</sub> O	39	48	54	87	109
AN90281N	K	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90291N	La	1000 ± 2	2% HNO <sub>3</sub>	39	48	54	87	109
AN90301C	Li	1000 ± 2	2% HCl	39	48	54	87	109
AN90301N	Li	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90311N	Lu	1000 ± 2	2% HNO <sub>3</sub>	60	97	129	204	343
AN90321C	Mg	1000 ± 2	2% HCl	39	48	54	87	109
AN90321N	Mg	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90331C	Mn	1000 ± 2	2% HCl	39	48	54	87	109
AN90331N	Mn	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90341A	Mo	1000 ± 2	2% NH <sub>4</sub> OH	35	45	49	82	106
AN90351H	Na	1000 ± 2	H <sub>2</sub> O	39	48	54	87	109
AN90351N	Na	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90361FN	Nb	1000 ± 2	1% HF + 5% HNO <sub>3</sub>	41	49	60	93	123
AN90371N	Nd	1000 ± 2	2% HNO <sub>3</sub>	41	49	60	93	123
AN90381C	Ni	1000 ± 2	2% HCl	39	48	54	87	109
AN90381N	Ni	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90391C	Os	1000 ± 5	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN90401S	P	1000 ± 2	0.05% H <sub>2</sub> SO <sub>4</sub>	35	45	49	82	106
AN90411N	Pb	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90421C	Pd	1000 ± 2	5% HCl	76	135	187	305	449
AN90431N	Pr	1000 ± 2	2% HNO <sub>3</sub>	41	49	60	93	123
AN90441C	Pt	1000 ± 2	5% HCl	86	108	129	204	384
AN90451H	Rb	1000 ± 2	H <sub>2</sub> O	39	48	54	87	109
AN90451N	Rb	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90461H	Re	1000 ± 2	H <sub>2</sub> O	N.C.	N.C.	N.C.	N.C.	N.C.
AN90471C	Rh	1000 ± 5	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN90481C	Ru	1000 ± 5	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN90491H	S	1000 ± 2	H <sub>2</sub> O	35	45	49	82	106
AN90501C	Sb	1000 ± 2	10% HCl	35	45	49	82	106
AN90501FN	Sb	1000 ± 2	1% HF + 5% HNO <sub>3</sub>	39	48	54	87	109
AN90511N	Se	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90521N	Sc	1000 ± 2	2% HNO <sub>3</sub>	52	83	103	143	204
AN90531F	Si	1000 ± 2	0.05% HF	35	45	49	82	106
AN90531H	Si	1000 ± 2	H <sub>2</sub> O	35	45	49	82	106
AN90541N	Sm	1000 ± 2	2% HNO <sub>3</sub>	41	52	60	93	123

## Certified reference materials ASTASOL® (1000 mg/l)

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN90551C	Sn	1000 ± 2	10% HCl	35	45	49	82	106
AN90551FN	Sn	1000 ± 2	1% HF + 5% HNO <sub>3</sub>	39	48	54	87	109
AN90561C	Sr	1000 ± 2	2% HCl	39	48	54	87	109
AN90561N	Sr	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90571FN	Ta	1000 ± 2	1% HF + 5% HNO <sub>3</sub>	41	52	60	93	123
AN90581N	Tb	1000 ± 2	2% HNO <sub>3</sub>	41	52	60	93	123
AN90591C	Te	1000 ± 2	20% HCl	41	52	60	93	123
AN90601N	Th	1000 ± 2	5% HNO <sub>3</sub>	41	52	60	93	123
AN90611FN	Ti	1000 ± 2	1% HF + 5% HNO <sub>3</sub>	35	45	49	82	106
AN90621N	Tl	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90631N	Tm	1000 ± 2	2% HNO <sub>3</sub>	41	52	60	93	123
AN90641N	U	1000 ± 2	2% HNO <sub>3</sub>	41	52	60	93	123
AN90651N	V	1000 ± 2	2% HNO <sub>3</sub>	41	52	60	93	123
AN90661A	W	1000 ± 2	2% NH <sub>4</sub> OH	41	52	60	93	123
AN90671N	Y	1000 ± 2	2% HNO <sub>3</sub>	41	52	60	93	123
AN90681N	Yb	1000 ± 2	2% HNO <sub>3</sub>	41	52	60	93	123
AN90691C	Zn	1000 ± 2	2% HCl	39	48	54	87	109
AN90691N	Zn	1000 ± 2	2% HNO <sub>3</sub>	35	45	49	82	106
AN90701FN	Zr	1000 ± 2	1% HF + 5% HNO <sub>3</sub>	41	52	60	93	123
AN90711H	Br <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	38	48	52	84	117
AN90721H	Cl <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	38	48	52	84	117
AN90731H	F <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	38	48	52	84	117
AN90741H	I <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	38	48	52	84	117
AN90751H	NO <sub>2</sub> <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	38	48	52	84	117
AN90761H	NO <sub>3</sub> <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	38	48	52	84	117
AN90771H	PO <sub>4</sub> <sup>3-</sup>	1000 ± 2	H <sub>2</sub> O	38	48	52	84	117
AN90781H	SO <sub>4</sub> <sup>2-</sup>	1000 ± 2	H <sub>2</sub> O	38	48	52	84	117
AN90791H	Cr <sup>6+</sup>	1000 ± 2	H <sub>2</sub> O	38	48	52	84	117
AN90801H	NH <sub>4</sub> <sup>+</sup>	1000 ± 2	H <sub>2</sub> O	38	48	52	84	117

**Certified reference materials ASTASOL® (10000 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN900110N	Ag	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN900210C	Al	10000 ± 20	5% HCl	56	75	93	93	230
AN900210N	Al	10000 ± 20	5% HNO <sub>3</sub>	56	75	93	154	230
AN900310N	As	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN900410C	Au	10000 ± 20	5% HCl	256	321	400	666	1131
AN900510A	B	10000 ± 20	2% NH <sub>4</sub> OH	56	75	93	154	230
AN900610C	Ba	10000 ± 20	5% HCl	56	75	93	154	230
AN900610N	Ba	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN900710N	Be	10000 ± 20	2% HNO <sub>3</sub>	140	191	238	502	851
AN900810N	Bi	10000 ± 20	5% HNO <sub>3</sub>	56	75	93	154	230
AN900910C	Ca	10000 ± 20	5% HCl	59	80	102	170	290
AN900910N	Ca	10000 ± 20	2% HNO <sub>3</sub>	59	80	102	170	239
AN901010C	Cd	10000 ± 20	5% HCl	56	75	93	154	230
AN901010N	Cd	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN901110N	Ce	10000 ± 20	5% HNO <sub>3</sub>	56	75	93	154	230
AN901210C	Co	10000 ± 20	5% HCl	56	75	93	154	230
AN901210N	Co	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN901310C	Cr	10000 ± 20	5% HCl	56	75	93	154	230
AN901310N	Cr	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN901410H	Cs	10000 ± 20	H <sub>2</sub> O	76	106	128	256	392
AN901410N	Cs	10000 ± 20	2% HNO <sub>3</sub>	76	106	128	256	392
AN901510C	Cu	10000 ± 20	2% HCl	56	75	93	154	230
AN901510N	Cu	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN901610N	Dy	10000 ± 20	2% HNO <sub>3</sub>	76	106	128	256	392
AN901710N	Er	10000 ± 20	2% HNO <sub>3</sub>	76	106	128	256	392
AN901810N	Eu	10000 ± 20	2% HNO <sub>3</sub>	95	121	144	306	509
AN901910C	Fe	10000 ± 20	5% HCl	56	75	93	154	230
AN901910N	Fe	10000 ± 20	5% HNO <sub>3</sub>	56	75	93	154	230
AN902010N	Ga	10000 ± 20	2% HNO <sub>3</sub>	80	108	128	256	391
AN902110N	Gd	10000 ± 20	2% HNO <sub>3</sub>	89	116	136	280	426
AN902210FN	Ge	10000 ± 20	1% HF + 5% HNO <sub>3</sub>	89	116	136	280	426
AN902310FN	Hf	10000 ± 20	1% HF + 5% HNO <sub>3</sub>	95	121	144	306	509
AN902410N	Hg	10000 ± 20	5% HNO <sub>3</sub>	56	75	93	154	230
AN902510N	Ho	10000 ± 20	2% HNO <sub>3</sub>	76	106	128	256	392
AN902610N	In	10000 ± 20	2% HNO <sub>3</sub>	60	83	106	188	316
AN902810H	K	10000 ± 20	H <sub>2</sub> O	56	75	93	154	230

**Certified reference materials ASTASOL® (10000 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN902810N	K	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN902910N	La	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN903010C	Li	10000 ± 20	5% HCl	56	75	93	154	230
AN903010N	Li	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN903110N	Lu	10000 ± 20	2% HNO <sub>3</sub>	204	319	374	596	1251
AN903210C	Mg	10000 ± 20	5% HCl	56	75	93	154	230
AN903210N	Mg	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN903310C	Mn	10000 ± 20	5% HCl	56	75	93	154	230
AN903310N	Mn	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN903410A	Mo	10000 ± 20	2% NH <sub>4</sub> OH	56	75	93	154	230
AN903510H	Na	10000 ± 20	H <sub>2</sub> O	56	75	93	154	230
AN903510N	Na	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN903610FN	Nb	10000 ± 20	1% HF + 5% HNO <sub>3</sub>	76	106	128	256	392
AN903710N	Nd	10000 ± 20	2% HNO <sub>3</sub>	76	106	128	256	392
AN903810C	Ni	10000 ± 20	5% HCl	56	75	93	154	230
AN903810N	Ni	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN904010S	P	10000 ± 20	0.05% H <sub>2</sub> SO <sub>4</sub>	56	75	93	154	230
AN904110N	Pb	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN904210C	Pd	10000 ± 20	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN904310N	Pr	10000 ± 20	2% HNO <sub>3</sub>	135	279	349	545	995
AN904410C	Pt	10000 ± 20	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN904510H	Rb	10000 ± 20	H <sub>2</sub> O	90	121	144	306	509
AN904510N	Rb	10000 ± 20	2% HNO <sub>3</sub>	90	121	144	306	509
AN904610H	Re	10000 ± 20	H <sub>2</sub> O	144	301	379	613	950
AN904710C	Rh	10000 ± 50	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN904810C	Ru	10000 ± 50	5% HCl	256	407	502	843	1306
AN904910H	S	10000 ± 20	H <sub>2</sub> O	56	75	93	154	230
AN905010C	Sb	10000 ± 20	10% HCl	56	75	93	154	230
AN905010FN	Sb	10000 ± 20	1% HF + 5% HNO <sub>3</sub>	56	75	93	154	230
AN905110N	Se	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN905210N	Sc	10000 ± 20	2% HNO <sub>3</sub>	178	246	298	494	816
AN905310F	Si	10000 ± 20	0.05% HF	56	75	93	154	230
AN905310H	Si	10000 ± 20	H <sub>2</sub> O	56	75	93	154	230
AN905410N	Sm	10000 ± 20	2% HNO <sub>3</sub>	76	106	128	256	396
AN905510C	Sn	10000 ± 20	20% HCl	56	75	93	154	230
AN905510FN	Sn	10000 ± 20	1% HF + 5% HNO <sub>3</sub>	56	75	93	154	230

**Certified reference materials ASTASOL® (10000 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN905610C	Sr	10000 ± 20	5% HCl	56	75	93	154	230
AN905610N	Sr	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN905710FN	Ta	10000 ± 20	1% HF + 5% HNO <sub>3</sub>	76	106	128	256	396
AN905810N	Tb	10000 ± 20	2% HNO <sub>3</sub>	101	148	174	332	536
AN905910C	Te	10000 ± 20	20% HCl	76	106	128	256	396
AN906110FN	Ti	10000 ± 20	1% HF + 5% HNO <sub>3</sub>	56	75	93	154	230
AN906210N	Tl	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN906310N	Tm	10000 ± 20	2% HNO <sub>3</sub>	246	332	400	673	1021
AN906510N	V	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN906610A	W	10000 ± 20	2% NH <sub>4</sub> OH	56	75	93	154	230
AN906710N	Y	10000 ± 20	2% HNO <sub>3</sub>	90	80	144	306	471
AN906810N	Yb	10000 ± 20	2% HNO <sub>3</sub>	76	106	128	256	396
AN906910C	Zn	10000 ± 20	5% HCl	56	75	93	154	230
AN906910N	Zn	10000 ± 20	2% HNO <sub>3</sub>	56	75	93	154	230
AN907010FN	Zr	10000 ± 20	1% HF + 5% HNO <sub>3</sub>	110	121	135	272	423
AN907110H	Br <sup>-</sup>	10000 ± 20	H <sub>2</sub> O	76	106	128	256	392
AN907210H	Cl <sup>-</sup>	10000 ± 20	H <sub>2</sub> O	76	106	128	256	392
AN907310H	F <sup>-</sup>	10000 ± 20	H <sub>2</sub> O	76	106	128	256	392
AN907410H	I <sup>-</sup>	10000 ± 20	H <sub>2</sub> O	76	106	128	256	392
AN907510H	NO <sub>2</sub> <sup>-</sup>	10000 ± 20	H <sub>2</sub> O	76	106	128	256	392
AN907610H	NO <sub>3</sub> <sup>-</sup>	10000 ± 20	H <sub>2</sub> O	76	106	128	256	392
AN907710H	PO <sub>4</sub> <sup>3-</sup>	10000 ± 20	H <sub>2</sub> O	76	106	128	256	392
AN907810H	SO <sub>4</sub> <sup>2-</sup>	10000 ± 20	H <sub>2</sub> O	76	106	128	256	392
AN907910H	Cr <sup>6+</sup>	10000 ± 20	H <sub>2</sub> O	76	106	128	256	392
AN908010H	NH <sub>4</sub> <sup>+</sup>	10000 ± 20	H <sub>2</sub> O	76	106	128	256	392



**Certified reference materials ASTASOL® (100 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN8001N	Ag	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8002C	Al	100 ± 0.2	5% HCl	34	45	51	84	103
AN8002N	Al	100 ± 0.2	5% HNO <sub>3</sub>	34	45	51	84	103
AN8003N	As	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8004C	Au	100 ± 0.2	5% HCl	40	50	56	90	108
AN8005H	B	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8006C	Ba	100 ± 0.2	2% HCl	34	45	51	84	103
AN8006N	Ba	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8007N	Be	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8008N	Bi	100 ± 0.2	5% HNO <sub>3</sub>	34	45	51	84	103
AN8009C	Ca	100 ± 0.2	2% HCl	34	45	51	84	103
AN8009N	Ca	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8010C	Cd	100 ± 0.2	2% HCl	34	45	51	84	103
AN8010N	Cd	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8011N	Ce	100 ± 0.2	5% HNO <sub>3</sub>	34	45	51	84	103
AN8012C	Co	100 ± 0.2	2% HCl	34	45	51	84	103
AN8012N	Co	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8013C	Cr	100 ± 0.2	2% HCl	34	45	51	84	103
AN8013N	Cr	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8014H	Cs	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8014N	Cs	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8015C	Cu	100 ± 0.2	2% HCl	34	45	51	84	103
AN8015N	Cu	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8016N	Dy	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8017N	Er	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8018N	Eu	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8019C	Fe	100 ± 0.2	5% HCl	34	45	51	84	103
AN8019N	Fe	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8020N	Ga	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8021N	Gd	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8022FN	Ge	100 ± 0.2	1% HF + 5% HNO <sub>3</sub>	34	45	51	84	103
AN8023FN	Hf	100 ± 0.2	1% HF + 5% HNO <sub>3</sub>	34	45	51	84	103
AN8024N	Hg	100 ± 0.2	5% HNO <sub>3</sub>	34	45	51	84	103
AN8025N	Ho	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8026N	In	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8027C	Ir	100 ± 0.5	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.



**Certified reference materials ASTASOL® (100 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN8028H	K	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8028N	K	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8029N	La	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8030C	Li	100 ± 0.2	2% HCl	34	45	51	84	103
AN8030N	Li	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8031N	Lu	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8032C	Mg	100 ± 0.2	2% HCl	34	45	51	84	103
AN8032N	Mg	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8033C	Mn	100 ± 0.2	2% HCl	34	45	51	84	103
AN8033N	Mn	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8034A	Mo	100 ± 0.2	2% NH <sub>4</sub> OH	40	50	56	90	108
AN8035H	Na	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8035N	Na	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8036FN	Nb	100 ± 0.2	1% HF + 5% HNO <sub>3</sub>	40	50	56	90	108
AN8037N	Nd	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8038C	Ni	100 ± 0.2	2% HCl	34	45	51	84	103
AN8038N	Ni	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8039C	Os	100 ± 0.5	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN8040S	P	100 ± 0.2	0.05% H <sub>2</sub> SO <sub>4</sub>	34	45	51	84	103
AN8041N	Pb	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8042C	Pd	100 ± 0.2	5% HCl	40	50	56	90	108
AN8043N	Pr	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8044C	Pt	100 ± 0.2	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN8045H	Rb	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8045N	Rb	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8046H	Re	100 ± 0.2	H <sub>2</sub> O	48	55	61	95	110
AN8047C	Rh	100 ± 0.5	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN8048C	Ru	100 ± 0.5	5% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN8049H	S	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8050C	Sb	100 ± 0.2	10% HCl	34	45	51	84	103
AN8050FN	Sb	100 ± 0.2	1% HF + 5% HNO <sub>3</sub>	34	45	51	84	103
AN8051N	Se	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8052N	Sc	100 ± 0.2	2% HNO <sub>3</sub>	48	55	61	95	110
AN8053F	Si	100 ± 0.2	0.05% HF	34	45	51	84	103
AN8053H	Si	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8054N	Sm	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108

**Certified reference materials ASTASOL® (100 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN8055C	Sn	100 ± 0.2	10% HCl	34	45	51	84	103
AN8055FN	Sn	100 ± 0.2	1% HF + 5% HNO <sub>3</sub>	34	45	51	84	103
AN8056C	Sr	100 ± 0.2	2% HCl	34	45	51	84	103
AN8056N	Sr	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8057FN	Ta	100 ± 0.2	1% HF + 5% HNO <sub>3</sub>	34	45	51	84	103
AN8058N	Tb	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8059C	Te	100 ± 0.2	20% HCl	34	45	51	84	103
AN8060N	Th	100 ± 0.2	5% HNO <sub>3</sub>	40	50	56	90	108
AN8061FN	Ti	100 ± 0.2	1% HF + 5% HNO <sub>3</sub>	34	45	51	84	103
AN8062N	Tl	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8063N	Tm	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8064N	U	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8065N	V	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8066A	W	100 ± 0.2	2% NH <sub>4</sub> OH	34	45	51	84	103
AN8067N	Y	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8068N	Yb	100 ± 0.2	2% HNO <sub>3</sub>	40	50	56	90	108
AN8069C	Zn	100 ± 0.2	2% HCl	34	45	51	84	103
AN8069N	Zn	100 ± 0.2	2% HNO <sub>3</sub>	34	45	51	84	103
AN8070FN	Zr	100 ± 0.2	1% HF + 5% HNO <sub>3</sub>	40	50	56	90	108
AN8071H	Br <sup>-</sup>	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8072H	Cl <sup>-</sup>	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8073H	F <sup>-</sup>	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8074H	I <sup>-</sup>	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8075H	NO <sub>2</sub> <sup>-</sup>	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8076H	NO <sub>3</sub> <sup>-</sup>	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8077H	PO <sub>4</sub> <sup>3-</sup>	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8078H	SO <sub>4</sub> <sup>2-</sup>	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8079H	Cr <sup>6+</sup>	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103
AN8080H	NH <sub>4</sub> <sup>+</sup>	100 ± 0.2	H <sub>2</sub> O	34	45	51	84	103

**Certified reference materials ASTASOL® (10 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN7001N	Ag	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7002N	Al	10 ± 0.05	5% HNO <sub>3</sub>	38	51	58	96	121
AN7003N	As	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7004C	Au	10 ± 0.05	5% HCl	43	55	63	101	129
AN7005H	B	10 ± 0.05	H <sub>2</sub> O	38	51	58	96	121
AN7006N	Ba	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7007N	Be	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7008N	Bi	10 ± 0.05	5% HNO <sub>3</sub>	38	51	58	96	121
AN7009N	Ca	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7010N	Cd	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7011N	Ce	10 ± 0.05	5% HNO <sub>3</sub>	38	51	58	96	121
AN7012N	Co	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7013N	Cr	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7014N	Cs	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7015N	Cu	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7016N	Dy	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7017N	Er	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7018N	Eu	10 ± 0.05	2% HNO <sub>3</sub>	43	55	62	101	129
AN7019N	Fe	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7020N	Ga	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7021N	Gd	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7022FN	Ge	10 ± 0.05	1% HF + 5% HNO <sub>3</sub>	38	51	58	96	121
AN7023FN	Hf	10 ± 0.05	1% HF + 5% HNO <sub>3</sub>	38	51	58	96	121
AN7024N	Hg	10 ± 0.05	5% HNO <sub>3</sub>	38	51	58	96	121
AN7025N	Ho	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7026N	In	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7028N	K	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7029N	La	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7030N	Li	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7031N	Lu	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7032N	Mg	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7033N	Mn	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7034A	Mo	10 ± 0.05	2% NH <sub>4</sub> OH	38	51	58	96	121
AN7035N	Na	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7036FN	Nb	10 ± 0.05	1% HF + 5% HNO <sub>3</sub>	38	51	58	96	121
AN7037N	Nd	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7038N	Ni	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121

**Certified reference materials ASTASOL® (10 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN7040S	P	10 ± 0.05	0.05% H <sub>2</sub> SO <sub>4</sub>	38	51	58	96	121
AN7041N	Pb	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7042C	Pd	10 ± 0.05	5% HCl	43	55	63	101	129
AN7043N	Pr	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7044C	Pt	10 ± 0.05	5% HCl	43	55	63	101	129
AN7045H	Rb	10 ± 0.05	H <sub>2</sub> O	43	55	63	101	129
AN7045N	Rb	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7046H	Re	10 ± 0.05	H <sub>2</sub> O	43	55	63	101	129
AN7047C	Rh	10 ± 0.1	5% HCl	43	55	63	101	129
AN7048C	Ru	10 ± 0.1	5% HCl	43	55	63	101	129
AN7049H	S	10 ± 0.05	H <sub>2</sub> O	38	51	58	96	121
AN7050FN	Sb	10 ± 0.05	1% HF + 5% HNO <sub>3</sub>	38	51	58	96	121
AN7051N	Se	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7052N	Sc	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7053F	Si	10 ± 0.05	0.05% HF	38	51	58	96	121
AN7054N	Sm	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7055FN	Sn	10 ± 0.05	1% HF + 5% HNO <sub>3</sub>	38	51	58	96	121
AN7056N	Sr	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7057FN	Ta	10 ± 0.05	1% HF + 5% HNO <sub>3</sub>	38	51	58	96	121
AN7058N	Tb	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7059C	Te	10 ± 0.05	20% HCl	38	51	58	96	121
AN7060N	Th	10 ± 0.05	5% HNO <sub>3</sub>	43	55	63	101	129
AN7061FN	Ti	10 ± 0.05	1% HF + 5% HNO <sub>3</sub>	38	51	58	96	121
AN7062N	Tl	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7063N	Tm	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7064N	U	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7065N	V	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7066A	W	10 ± 0.05	2% NH <sub>4</sub> OH	38	51	58	96	121
AN7067N	Y	10 ± 0.05	2% HNO <sub>3</sub>	43	55	63	101	129
AN7068N	Yb	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7069N	Zn	10 ± 0.05	2% HNO <sub>3</sub>	38	51	58	96	121
AN7070FN	Zr	10 ± 0.05	1% HF + 5% HNO <sub>3</sub>	43	55	63	101	129

## Multi-element certified reference materials ASTASOL®-MIX

Product code	Matrix (v/v)	Price EUR				
		30 ml	50 ml	100 ml	250 ml	500 ml
AN9081MC	2% HCl	53	62	94	170	266
AN9082MN	2% HNO <sub>3</sub>	53	67	101	184	286
AN9083MC	1% HCl	61	70	106	192	300
AN9084MN	5% HNO <sub>3</sub>	61	86	129	234	378
AN9085MCN	5% aqua regia	64	84	127	230	360
AN9086MN	10% HNO <sub>3</sub>	71	92	138	251	386
AN9087MC	20% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN9088MN	5% HNO <sub>3</sub>	68	103	157	284	444
AN9089MN	5% HNO <sub>3</sub>	62	67	100	181	284
AN9090MN	5% HNO <sub>3</sub>	100	149	213	357	546
AN9091MN	2% HNO <sub>3</sub>	56	67	91	184	293
AN9092MN	10% HNO <sub>3</sub>	105	136	210	336	516
AN9093MN	5% HNO <sub>3</sub>	67	102	154	280	430
AN9094MFN	5% HNO <sub>3</sub> + 0,2% HF	78	105	156	284	438
AN9095MFN	5% HNO <sub>3</sub>	63	81	122	221	359
AN9096MN	5% HNO <sub>3</sub>	56	78	102	140	209
AN9097MN	1% HNO <sub>3</sub>	54	68	83	141	224
AN9098MN	5% HNO <sub>3</sub>	62	94	143	259	403
AN9099MN	5% HNO <sub>3</sub>	53	63	74	106	165
AN9104MN	5% HNO <sub>3</sub>	105	159	237	390	641
AN9108MN	5% HNO <sub>3</sub>	88	104	149	270	421
AN9109MN	2% HNO <sub>3</sub>	53	68	103	172	290
AN9110MN	5% HNO <sub>3</sub> + traces HF	65	98	149	265	422
AN9111MC	2% HCl	57	89	127	225	360
AN9112MN	5% HNO <sub>3</sub>	64	84	127	230	367
AN9113MN	5% HNO <sub>3</sub>	62	76	85	159	259
AN9114MN	10% HNO <sub>3</sub>	104	160	196	304	462
AN9115MN	5% HNO <sub>3</sub>	109	128	215	358	591
AN9116MFN	2% HNO <sub>3</sub> + 0.5% HF	61	68	75	135	209
AN9117MN	5% HNO <sub>3</sub>	78	113	164	295	460
AN9118MN	1% HNO <sub>3</sub>	75	104	145	170	249
AN9119MN	5% HNO <sub>3</sub>	53	59	91	164	256
AN9120MC	10% HCl	N.C.	N.C.	N.C.	N.C.	N.C.
AN9121MC	10% HCl	103	143	205	412	628
AN9122MN	5% HNO <sub>3</sub>	75	98	151	236	354
AN9123MN	5% HNO <sub>3</sub>	64	97	145	224	347
AN9124MN	5% HNO <sub>3</sub>	54	83	124	201	312
AN9125MN	5% HNO <sub>3</sub>	66	84	125	194	301
AN9126MN	5% HNO <sub>3</sub>	90	135	202	312	483

**Certified reference materials ASTASOL®-IC (1000 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN90711HIC	Br <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90721HIC	Cl <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90731HIC	F <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90741HIC	I <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90751HIC	NO <sub>2</sub> <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90761HIC	NO <sub>3</sub> <sup>-</sup>	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90771HIC	PO <sub>4</sub> <sup>3-</sup>	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90781HIC	SO <sub>4</sub> <sup>2-</sup>	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90791HIC	Cr <sup>6+</sup>	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90801HIC	NH <sub>4</sub> <sup>+</sup>	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90061HIC	Ba	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90091HIC	Ca	1000 ± 2	H <sub>2</sub> O	41	49	53	86	118
AN90141HIC	Cs	1000 ± 2	H <sub>2</sub> O	43	50	61	94	124
AN90281NIC	K	1000 ± 2	0,005% HNO <sub>3</sub>	43	50	55	88	120
AN90301NIC	Li	1000 ± 2	0,005% HNO <sub>3</sub>	43	50	55	88	120
AN90321HIC	Mg	1000 ± 2	H <sub>2</sub> O	43	50	55	88	120
AN90351NIC	Na	1000 ± 2	0,005% HNO <sub>3</sub>	43	50	55	88	120
AN90451NIC	Rb	1000 ± 2	0,005% HNO <sub>3</sub>	43	50	55	88	120
AN90561NIC	Sr	1000 ± 2	0,005% HNO <sub>3</sub>	43	50	55	88	120

**Certified reference materials ASTASOL®-IC (100 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN8071HIC	Br <sup>-</sup>	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8072HIC	Cl <sup>-</sup>	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8073HIC	F <sup>-</sup>	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8074HIC	I <sup>-</sup>	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8075HIC	NO <sub>2</sub> <sup>-</sup>	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8076HIC	NO <sub>3</sub> <sup>-</sup>	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8077HIC	PO <sub>4</sub> <sup>3-</sup>	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8078HIC	SO <sub>4</sub> <sup>2-</sup>	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8079HIC	Cr <sup>6+</sup>	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8080HIC	NH <sub>4</sub> <sup>+</sup>	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8006HIC	Ba	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8009HIC	Ca	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8014HIC	Cs	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8028NIC	K	100 ± 2	0,005% HNO <sub>3</sub>	40	50	56	90	108
AN8030NIC	Li	100 ± 2	0,005% HNO <sub>3</sub>	40	50	56	90	108

## Certified reference materials ASTASOL®-IC (100 mg/l)

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN8032HIC	Mg	100 ± 2	H <sub>2</sub> O	40	50	56	90	108
AN8035NIC	Na	100 ± 2	0,005% HNO <sub>3</sub>	40	50	56	90	108
AN8045NIC	Rb	100 ± 2	0,005% HNO <sub>3</sub>	48	55	61	95	110
AN8056NIC	Sr	100 ± 2	0,005% HNO <sub>3</sub>	40	50	56	90	108

## Multi-element certified reference materials ASTASOL®-IC

Product code	Analytes	Concentration (mg/l)	Matrix (v/v)	Price EUR				
				30 ml	50 ml	100 ml	250 ml	500 ml
AN9100MHIC	Br <sup>-</sup> , Cl <sup>-</sup> , F <sup>-</sup>	1000	H <sub>2</sub> O	58	67	100	181	283
AN9101MHIC	NO <sub>3</sub> <sup>-</sup> , PO <sub>4</sub> <sup>3-</sup> , SO <sub>4</sub> <sup>2-</sup>	1000	H <sub>2</sub> O	58	67	100	180	281
AN9102MHIC	Br <sup>-</sup> , Cl <sup>-</sup> , F <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , PO <sub>4</sub> <sup>3-</sup> , SO <sub>4</sub> <sup>2-</sup>	100	H <sub>2</sub> O	59	78	101	181	290
AN9103MHIC	Ba, Ca, K, Li, Mg, Na, NH <sub>4</sub> <sup>+</sup> , Sr	100	H <sub>2</sub> O	91	99	126	227	357
AN9105MNIC	Ba, Ca, K, Li, Mg, Mn, Na, NH <sub>4</sub> <sup>+</sup> , Sr	100	0,1% HNO <sub>3</sub>	93	102	129	234	364
AN9106MHIC	Br <sup>-</sup> , Cl <sup>-</sup> , F <sup>-</sup> , NO <sub>2</sub> <sup>-</sup> , NO <sub>3</sub> <sup>-</sup> , PO <sub>4</sub> <sup>3-</sup> , SO <sub>4</sub> <sup>2-</sup>	1000	H <sub>2</sub> O	65	92	140	253	397
AN9107MHIC	NH <sub>4</sub> <sup>+</sup> -N, NO <sub>3</sub> <sup>-</sup> -N, PO <sub>4</sub> <sup>3-</sup> -P, SO <sub>4</sub> <sup>2-</sup> -S	100	H <sub>2</sub> O	84	104	127	230	358



## Reference materials ASTASOL® (1000 mg/l)

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR		
				100 ml	250 ml	500 ml
ANS001	Ag	1000 ± 5	2% HNO <sub>3</sub>	31	46	54
ANS002	Al	1000 ± 5	5% HCl	28	39	44
ANS002N	Al	1000 ± 5	5% HNO <sub>3</sub>	28	39	44
ANS003	As	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS005	B	1000 ± 5	H <sub>2</sub> O	28	39	44
ANS006	Ba	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS008	Bi	1000 ± 5	5% HNO <sub>3</sub>	28	39	44
ANS009	Ca	1000 ± 5	2% HNO <sub>3</sub>	29	44	52
ANS010	Cd	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS012	Co	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS013	Cr	1000 ± 5	2% HNO <sub>3</sub>	29	44	52
ANS015	Cu	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS019	Fe	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS024	Hg	1000 ± 5	5% HNO <sub>3</sub>	28	39	44
ANS028	K	1000 ± 5	H <sub>2</sub> O	28	39	44
ANS030	Li	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS032	Mg	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS033	Mn	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS034	Mo	1000 ± 5	2% NH <sub>4</sub> OH	29	44	52
ANS035	Na	1000 ± 5	H <sub>2</sub> O	28	39	44
ANS038	Ni	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS040	P	1000 ± 5	0.05% H <sub>2</sub> SO <sub>4</sub>	28	39	44
ANS041	Pb	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS050	Sb	1000 ± 5	10% HCl	28	39	44
ANS051	Se	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS053	Si	1000 ± 5	H <sub>2</sub> O	28	39	44
ANS055	Sn	1000 ± 5	10% HCl	28	39	44
ANS056	Sr	1000 ± 5	2% HNO <sub>3</sub>	29	44	52
ANS061	Ti	1000 ± 5	1% HF + 5% HNO <sub>3</sub>	28	39	44
ANS062	Tl	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS065	V	1000 ± 5	2% HNO <sub>3</sub>	31	46	54
ANS066	W	1000 ± 5	2% NH <sub>4</sub> OH	31	46	54
ANS069	Zn	1000 ± 5	2% HNO <sub>3</sub>	28	39	44
ANS072	Cl <sup>-</sup>	1000 ± 5	H <sub>2</sub> O	28	39	44
ANS073	F <sup>-</sup>	1000 ± 5	H <sub>2</sub> O	28	39	44
ANS075	NO <sub>2</sub> <sup>-</sup>	1000 ± 5	H <sub>2</sub> O	28	39	44
ANS076	NO <sub>3</sub> <sup>-</sup>	1000 ± 5	H <sub>2</sub> O	28	39	44
ANS077	PO <sub>4</sub> <sup>3-</sup>	1000 ± 5	H <sub>2</sub> O	28	39	44
ANS078	SO <sub>4</sub> <sup>2-</sup>	1000 ± 5	H <sub>2</sub> O	28	39	44
ANS079	Cr <sup>6+</sup>	1000 ± 5	H <sub>2</sub> O	28	39	44
ANS080	NH <sub>4</sub> <sup>+</sup>	1000 ± 5	H <sub>2</sub> O	28	39	44

## Reference materials ASTASOL® (10000 mg/l)

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR		
				100 ml	250 ml	500 ml
ANS201	Ag	10000 ± 50	2% HNO <sub>3</sub>	77	129	257
ANS202	Al	10000 ± 50	5% HCl	74	121	204
ANS202N	Al	10000 ± 50	5% HNO <sub>3</sub>	74	121	204
ANS203	As	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS205	B	10000 ± 50	2% NH <sub>4</sub> OH	74	121	204
ANS206	Ba	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS208	Bi	10000 ± 50	5% HNO <sub>3</sub>	74	121	204
ANS209	Ca	10000 ± 50	2% HNO <sub>3</sub>	75	126	245
ANS210	Cd	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS212	Co	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS213	Cr	10000 ± 50	2% HNO <sub>3</sub>	75	126	245
ANS215	Cu	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS219	Fe	10000 ± 50	5% HNO <sub>3</sub>	74	121	204
ANS224	Hg	10000 ± 50	5% HNO <sub>3</sub>	74	121	204
ANS228	K	10000 ± 50	H <sub>2</sub> O	74	121	204
ANS230	Li	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS232	Mg	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS233	Mn	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS234	Mo	10000 ± 50	2% NH <sub>4</sub> OH	75	126	245
ANS235	Na	10000 ± 50	H <sub>2</sub> O	74	121	204
ANS238	Ni	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS240	P	10000 ± 50	0.05% H <sub>2</sub> SO <sub>4</sub>	74	121	204
ANS241	Pb	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS250	Sb	10000 ± 50	10% HCl	74	121	204
ANS251	Se	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS253	Si	10000 ± 50	H <sub>2</sub> O	74	121	204
ANS255	Sn	10000 ± 50	20% HCl	74	121	204
ANS256	Sr	10000 ± 50	2% HNO <sub>3</sub>	75	126	245
ANS261	Ti	10000 ± 50	1% HF + 5% HNO <sub>3</sub>	74	121	204
ANS262	Tl	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS265	V	10000 ± 50	2% HNO <sub>3</sub>	77	129	257
ANS266	W	10000 ± 50	2% NH <sub>4</sub> OH	77	129	257
ANS269	Zn	10000 ± 50	2% HNO <sub>3</sub>	74	121	204
ANS272	Cl <sup>-</sup>	10000 ± 50	H <sub>2</sub> O	75	123	224
ANS273	F <sup>-</sup>	10000 ± 50	H <sub>2</sub> O	75	123	224
ANS275	NO <sub>2</sub> <sup>-</sup>	10000 ± 50	H <sub>2</sub> O	75	123	224

**Reference materials ASTASOL® (10000 mg/l)**

Product code	Analyte	Concentration (mg/l)	Matrix (v/v)	Price EUR		
				100 ml	250 ml	500 ml
ANS276	NO <sub>3</sub> <sup>-</sup>	10000 ± 50	H <sub>2</sub> O	75	123	224
ANS277	PO <sub>4</sub> <sup>3-</sup>	10000 ± 50	H <sub>2</sub> O	75	123	224
ANS278	SO <sub>4</sub> <sup>2-</sup>	10000 ± 50	H <sub>2</sub> O	75	123	224
ANS279	Cr <sup>6+</sup>	10000 ± 50	H <sub>2</sub> O	75	123	224
ANS280	NH <sub>4</sub> <sup>+</sup>	10000 ± 50	H <sub>2</sub> O	75	123	224

**Multi-element reference materials ASTASOL®**

Product code	Matrix (v/v)	Price EUR		
		100 ml	250 ml	500 ml
ANM010	5% HNO <sub>3</sub>	101	136	165
ANM012	10% HNO <sub>3</sub>	74	111	185
ANM1001IC	H <sub>2</sub> O	62	94	149
ANM1002IC	H <sub>2</sub> O	82	123	204
ANM1004	2% HNO <sub>3</sub> + tr. HF	106	158	261
ANM1014	H <sub>2</sub> O	54	67	103

**Certified reference materials pHanal™ (for pH measurement)**

Product code	pH	Matrix	Price EUR		
			100 ml	250 ml	500 ml
CRMpH1677	1.677	H <sub>2</sub> O	41	60	79
CRMpH3781	3.781	H <sub>2</sub> O	41	60	79
CRMpH4001	4.001	H <sub>2</sub> O	41	60	79
CRMpH6881	6.881	H <sub>2</sub> O	41	60	79
CRMpH7429	7.429	H <sub>2</sub> O	41	60	79
CRMpH9225	9.225	H <sub>2</sub> O	41	60	79
CRMpH10062	10.062	H <sub>2</sub> O	41	60	79

**Reference materials pHanal™ (for pH measurement)**

Product code	pH	Matrix	Price EUR				
			100 ml	250 ml	500 ml	1000 ml	5000 ml
PH04	4	H <sub>2</sub> O	19	24	27	40	96
PH04B	4	H <sub>2</sub> O	19	24	27	40	96
PH07	7	H <sub>2</sub> O	19	24	27	40	96
PH07B	7	H <sub>2</sub> O	19	24	27	40	96
PH09	9	H <sub>2</sub> O	19	24	27	40	96
PH10	10	H <sub>2</sub> O	19	24	27	40	96
PH10B	10	H <sub>2</sub> O	19	24	27	40	96

**Certified reference materials CONDUCTANAL™ (measurement of conductivity)**

Product code	Conductivity (μS/cm)	Matrix	Price EUR		
			100 ml	250 ml	500 ml
CON 01	147	H <sub>2</sub> O	27	35	53
CON 02	1015	H <sub>2</sub> O	27	35	53
CON 03	1413	H <sub>2</sub> O	27	35	53
CON 04	12880	H <sub>2</sub> O	27	35	53
CON 05	111300	H <sub>2</sub> O	27	35	53

## Auxiliary reagents

Product code	Agent(s)	Concentration (g/l)	Matix (v/v)	Volume (ml)	Price EUR
V001-500	CsCl	25	H <sub>2</sub> O	500	140
V002-500	KCl	25	H <sub>2</sub> O	500	74
V003-500	LaCl <sub>3</sub>	25	H <sub>2</sub> O	500	111
V0042-250	CsCl + La(Cl) <sub>3</sub>	10 + 100	H <sub>2</sub> O	250	104
V004-50	Pd+Mg(NO <sub>3</sub> ) <sub>2</sub>	1 + 0.6	2% HNO <sub>3</sub>	50	100
V005-50	Pd	2	5% HNO <sub>3</sub>	50	91
V0051-25	Pd	10	5% HNO <sub>3</sub>	25	120
V006-50	Mg	2	0.2% HNO <sub>3</sub>	50	42
V0061-50	Mg	10	0.2% HNO <sub>3</sub>	50	45
V007-50	NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub>	200	H <sub>2</sub> O	50	122
V008-50	Ascorbic acid	10	H <sub>2</sub> O	50	71
V009-50	Ni(NO <sub>3</sub> )x6H <sub>2</sub> O	10	1% HNO <sub>3</sub>	50	56
V0091-25	Ni(NO <sub>3</sub> )x6H <sub>2</sub> O	50	1% HNO <sub>3</sub>	25	63
V010-50	NH <sub>4</sub> NO <sub>3</sub>	50	1% HNO <sub>3</sub>	50	114
SCH0111	Sodium borohydride	neat	-	100 g	152

## Certified referenece materials for the determination of inorganic (TIC) and organic (TOC) carbon

Product code	Description	Concentration (mg/l)	Matrix	Price EUR	
				100 ml	500 ml
TIC1H	Total inorganic carbon	1000	H <sub>2</sub> O	69	91
TIC2H	Total inorganic carbon	500	H <sub>2</sub> O	66	88
TIC3H	Total inorganic carbon	100	H <sub>2</sub> O	61	83
TIC4H	Total inorganic carbon	50	H <sub>2</sub> O	58	80
TIC5H	Total inorganic carbon	10	H <sub>2</sub> O	53	75
TOC1H	Total organic carbon	1000	H <sub>2</sub> O	69	91
TOC2H	Total organic carbon	500	H <sub>2</sub> O	66	88
TOC3H	Total organic carbon	100	H <sub>2</sub> O	61	83
TOC4H	Total organic carbon	50	H <sub>2</sub> O	58	80
TOC5H	Total organic carbon	10	H <sub>2</sub> O	53	75
TIOC1H	Total inorg. + org. carbon	1000	H <sub>2</sub> O	72	95
TIOC2H	Total inorg. + org. carbon	500	H <sub>2</sub> O	69	91
TIOC3H	Total inorg. + org. carbon	100	H <sub>2</sub> O	64	87
TIOC4H	Total inorg. + org. carbon	50	H <sub>2</sub> O	61	83
TIOC5H	Total inorg. + org. carbon	10	H <sub>2</sub> O	56	79

**ANALPURE® Ultra reagents**

Product code	Description	Packing material	Volume (ml)	Price EUR
UAc0031x	HCl, 32-35%, ANALPURE® Ultra	PFA	250	315
UAc0031a	HCl, 32-35%, ANALPURE® Ultra	PFA	500	473
UAc0031b	HCl, 32-35%, ANALPURE® Ultra	PFA	1000	773
UAc0031e	HCl, 32-35%, ANALPURE® Ultra	FEP	2000	1273
UAc0061x	HNO <sub>3</sub> , 67-69%, ANALPURE® Ultra	FEP	250	319
UAc0061a	HNO <sub>3</sub> , 67-69%, ANALPURE® Ultra	FEP	500	469
UAc0061b	HNO <sub>3</sub> , 67-69%, ANALPURE® Ultra	FEP	1000	775
UAc0061e	HNO <sub>3</sub> , 67-69%, ANALPURE® Ultra	FEP	2000	1290
UAc0091x	HF, 47-51%, ANALPURE® Ultra	PFA	250	404
UAc0091a	HF, 47-51%, ANALPURE® Ultra	PFA	500	606
UAc0091b	HF, 47-51%, ANALPURE® Ultra	PFA	1000	1087
UAc0012x	H <sub>2</sub> SO <sub>4</sub> , 93-98%, ANALPURE® Ultra	FEP	250	349
UAc0012a	H <sub>2</sub> SO <sub>4</sub> , 93-98%, ANALPURE® Ultra	FEP	500	511
UAc0012b	H <sub>2</sub> SO <sub>4</sub> , 93-98%, ANALPURE® Ultra	FEP	1000	897
UAc0012e	H <sub>2</sub> SO <sub>4</sub> , 93-98%, ANALPURE® Ultra	FEP	2000	1637
UAc11002x	HClO <sub>4</sub> , 65-71%, ANALPURE® Ultra	FEP	250	417
UAc11002a	HClO <sub>4</sub> , 65-71%, ANALPURE® Ultra	FEP	500	595
UAc11002b	HClO <sub>4</sub> , 65-71%, ANALPURE® Ultra	FEP	1000	991
UAc0019x	HBr, 44-49%, ANALPURE® Ultra	FEP	250	514
UAc0019a	HBr, 44-49%, ANALPURE® Ultra	FEP	500	755
UAc0019b	HBr, 44-49%, ANALPURE® Ultra	FEP	1000	1228
UAc0019e	HBr, 44-49%, ANALPURE® Ultra	FEP	2000	1853
UAc0017x	CH <sub>3</sub> COOH, min. 99%, ANALPURE® Ultra	FEP	250	330
UAc0017a	CH <sub>3</sub> COOH, min. 99%, ANALPURE® Ultra	FEP	500	479
UAc0017b	CH <sub>3</sub> COOH, min. 99%, ANALPURE® Ultra	FEP	1000	779
UCH0170x	NH <sub>4</sub> OH, 20-22%, ANALPURE® Ultra	HDPE	250	203
UCH0170a	NH <sub>4</sub> OH, 20-22%, ANALPURE® Ultra	HDPE	500	357
UCH0170b	NH <sub>4</sub> OH, 20-22%, ANALPURE® Ultra	HDPE	1000	614
qUAq0001	H <sub>2</sub> O Ultra-pure water Ultra	LDPE	1000	55
UCH02161a	H <sub>2</sub> O <sub>2</sub> , ANALPURE® Ultra	FEP	500	452

**ANALPURE® reagents**

Product code	Description	Packing material	Volume (ml)	Price EUR
SAc0031a	HCl, 34-37%, ANALPURE®	HDPE	500	60
SAc0031b	HCl, 34-37%, ANALPURE®	HDPE	1000	94
SAc0031e	HCl, 34-37%, ANALPURE®	HDPE	2500	125
SAc0032b	HCl, 29-31%, ANALPURE®	HDPE	1000	94
SAc0061a	HNO <sub>3</sub> , 67-69%, ANALPURE®	HDPE	500	62
SAc0061b	HNO <sub>3</sub> , 67-69%, ANALPURE®	HDPE	1000	101
SAc0061e	HNO <sub>3</sub> , 67-69%, ANALPURE®	HDPE	2500	134

**ANALPURE® reagents**

Product code	Description	Packing material	Volume (ml)	Price EUR
SAc0091a	HF, 47-51%, ANALPURE®	HDPE	500	119
SAc0091b	HF, 47-51%, ANALPURE®	HDPE	1000	131
SAc0012a	H <sub>2</sub> SO <sub>4</sub> , 93-98%, ANALPURE®	HDPE	500	68
SAc0012b	H <sub>2</sub> SO <sub>4</sub> , 93-98%, ANALPURE®	HDPE	1000	107
SAc0012e	H <sub>2</sub> SO <sub>4</sub> , 93-98%, ANALPURE®	HDPE	2500	142
SAc0017a	CH <sub>3</sub> COOH, min. 99%, ANALPURE®	HDPE	500	64
SAc0017b	CH <sub>3</sub> COOH, min. 99%, ANALPURE®	HDPE	1000	105
SAc0017e	CH <sub>3</sub> COOH, min. 99%, ANALPURE®	HDPE	2500	139
SAc11002a	HClO <sub>4</sub> , 65-71%, ANALPURE®	Glass	500	141
SAc11002b	HClO <sub>4</sub> , 65-71%, ANALPURE®	Glass	1000	227
SAc11002e	HClO <sub>4</sub> , 65-71%, ANALPURE®	Glass	2500	360
SCH0170a	NH <sub>4</sub> OH, 20-22%, ANALPURE®	HDPE	500	56
SCH0170b	NH <sub>4</sub> OH, 20-22%, ANALPURE®	HDPE	1000	98
SAq0001b	H <sub>2</sub> O pro TOC, LC, HPLC, ANALPURE®	Glass	1000	54
SAq0001f	H <sub>2</sub> O pro TOC, LC, HPLC, ANALPURE®	Glass	4000	96

**P.a.+ acids**

Product code	Description	Packing material	Volume (ml)	Price EUR
SAc10001	HClO <sub>4</sub> , min. 68%, p.a.+	Glass	1000	144
SAc20001	HCl, min. 37%, p.a.+	Glass	1000	13
SAc30001	HNO <sub>3</sub> , min. 65%, p.a.+	Glass	1000	12
SAc40001	HF, min. 48%, p.a.+	HDPE	1000	18
SAc50001	H <sub>2</sub> SO <sub>4</sub> , min. 95%, p.a.+	Glass	1000	14
SAc70001	CH <sub>3</sub> COOH, min. 99%, p.a.+	Glass	1000	48
SAc70002	CH <sub>3</sub> COOH, min. 99%, p.a.+	Glass	2500	91
SCH02161	H <sub>2</sub> O <sub>2</sub> , p.a.+	LDPE	1000	35

**P.a. acids**

Product code	Description	Packing material	Volume (ml)	Price EUR
SAc00011b	HCl, min. 37%, p.a.	Glass or HDPE	1000	6
SAc0004b	HNO <sub>3</sub> , min. 65%, p.a.	Glass	1000	7
SAc0007b	HF, min. 47%, p.a.	HDPE	1000	15
SCH501	H <sub>2</sub> SO <sub>4</sub> , min. 95%, p.a.	Glass	1000	7





**Matrix reference materials**

Product code	Description	Packng material	Packing (g)	Price EUR
Metranal01	River sediment 1	HDPE	80	74
Metranal06	Sewage sludge 1	HDPE	60	74
Metranal08	Green Algae	HDPE	20	59
Metranal09	Industrial sandy-loam soil	Glass	50	90
Metranal14	River sediment RS-01-2	Glass	60	132
Metranal17	Set of 3 envir. samples for Hg determination	HDPE	3x 15	108
Metranal18	Pond sediment RS-01-2	Glass	40	74
Metranal20	Sewage sludge SS-02	Glass	40	90
Metranal22	Industrial polluted land	Glass	40	74
Metranal31	Light sandy soil - normal levels	HDPE	80	95
Metranal32	Light sandy soil - elevated levels	HDPE	80	95
Metranal33	Clay loam soil - normal levels	HDPE	80	95
Metranal34	Clay loam soil - elevated levels	HDPE	80	95

**Les prix sont donnés hors TVA, en Euros**

**PORT :**

**Pour les produits référencés dangereux (avec acide), le port sera facturé en sus, l'expédition étant faite conformément à la législation\* par transporteur agréé « matières dangereuses ». Pensez à grouper vos commandes pour minimiser le coût. A titre d'information pour un poids < à 10 kg, le prix du port est de 50 €HT.**

**\* A titre d'information, l'amende pour infraction au transport des matières dangereuses, peut aller jusqu'à 30000 Euros et incrimine l'expéditeur et le donneur d'ordre !**

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