



Reagecon

Ion Chromatography Standards

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These standards are prepared, tested, certified and verified by following the exact same regime as already presented for ICP-MS Standards. The raw material specifications are in most cases identical to the materials used for ICP-MS. Additionally, the elemental anions and cations are also analysed by ICP-MS. All results are verified on a state of the art Ion Chromatograph, which is calibrated using high purity ISO Guide 34 accredited standards, similar in concentration to the products listed below.

Anion Standards

Product No.	Ion	Starting Material	Matrix	Concentration	Pack size
Acetate					
ICAU35	CH ₃ COO-	Sodium Acetate	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS35	CH ₃ COO-	Sodium Acetate	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB35	CH ₃ COO-	Sodium Acetate	H ₂ O	1mg/ml (1,000ppm)	500ml
Bromide					
ICAU01	Br-	KBr	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS01	Br-	KBr	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB01	Br-	KBr	H ₂ O	1mg/ml (1,000ppm)	500ml
Chloride					
ICAU02	Cl-	KCl	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS02	Cl-	KCl	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB02	Cl-	KCl	H ₂ O	1mg/ml (1,000ppm)	500ml
Chromate					
ICAU29	CrO ₄ ²⁻	NH ₄ Cr ₂ O ₇	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS29	CrO ₄ ²⁻	NH ₄ Cr ₂ O ₇	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB29	CrO ₄ ²⁻	NH ₄ Cr ₂ O ₇	H ₂ O	1mg/ml (1,000ppm)	500ml
Cyanide					
ICAU08	CN-	NaCN	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS08	CN-	NaCN	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB08	CN-	NaCN	H ₂ O	1mg/ml (1,000ppm)	500ml
Fluoride					
ICAU03	F-	NaF	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS03	F-	NaF	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB03	F-	NaF	H ₂ O	1mg/ml (1,000ppm)	500ml
Formate					
ICAU34	HCOO-	Sodium Formate	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS34	HCOO-	Sodium Formate	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB34	HCOO-	Sodium Formate	H ₂ O	1mg/ml (1,000ppm)	500ml
Iodide					
ICAU40	I-	NH ₄ I	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS40	I-	NH ₄ I	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB40	I-	NH ₄ I	H ₂ O	1mg/ml (1,000ppm)	500ml

Product No.	Ion	Starting Material	Matrix	Concentration	Pack size
Nitrate					
ICAU04	NO ₃ ⁻	NH ₄ NO ₃	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS04	NO ₃ ⁻	NH ₄ NO ₃	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB04	NO ₃ ⁻	NH ₄ NO ₃	H ₂ O	1mg/ml (1,000ppm)	500ml
Nitrite					
ICAU11	NO ₂ ⁻	NaNO ₂	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS11	NO ₂ ⁻	NaNO ₂	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB11	NO ₂ ⁻	NaNO ₂	H ₂ O	1mg/ml (1,000ppm)	500ml
Oxalate					
ICAU13	(COO) ₂ ²⁻	K ₂ C ₂ O ₄	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS13	(COO) ₂ ²⁻	K ₂ C ₂ O ₄	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB13	(COO) ₂ ²⁻	K ₂ C ₂ O ₄	H ₂ O	1mg/ml (1,000ppm)	500ml
Phosphate					
ICAU05	PO ₄ ³⁻	NH ₄ H ₂ PO ₄	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS05	PO ₄ ³⁻	NH ₄ H ₂ PO ₄	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB05	PO ₄ ³⁻	NH ₄ H ₂ PO ₄	H ₂ O	1mg/ml (1,000ppm)	500ml
Silica					
ICAU12	SiO ₂	Na ₂ O ₃ Si	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS12	SiO ₂	Na ₂ O ₃ Si	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB12	SiO ₂	Na ₂ O ₃ Si	H ₂ O	1mg/ml (1,000ppm)	500ml
Sulphate					
ICAU06	SO ₄ ²⁻	(NH ₄) ₂ SO ₄	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS06	SO ₄ ²⁻	(NH ₄) ₂ SO ₄	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB06	SO ₄ ²⁻	(NH ₄) ₂ SO ₄	H ₂ O	1mg/ml (1,000ppm)	500ml
Tartrate					
ICAU36	(CHOH) ₂ (COO) ₂ ²⁻	Tartaric Acid	H ₂ O	0.1mg/ml (100ppm)	100ml
ICAS36	(CHOH) ₂ (COO) ₂ ²⁻	Tartaric Acid	H ₂ O	1mg/ml (1,000ppm)	100ml
ICAB36	(CHOH) ₂ (COO) ₂ ²⁻	Tartaric Acid	H ₂ O	1mg/ml (1,000ppm)	500ml

Cation Standards

Product No.	Ion	Starting Material	Matrix	Concentration	Pack size
Aluminium					
ICCU06	Al ⁴⁺	Al(NO ₃) ₃	H ₂ O	0.1mg/ml (100ppm)	100ml
ICCS06	Al ⁴⁺	Al(NO ₃) ₃	H ₂ O	1mg/ml (1,000ppm)	100ml
ICCB06	Al ⁴⁺	Al(NO ₃) ₃	H ₂ O	1mg/ml (1,000ppm)	500ml
Ammonium					
ICCU01	NH ₄ ⁺	NH ₄ Cl	H ₂ O	0.1mg/ml (100ppm)	100ml
ICCS01	NH ₄ ⁺	NH ₄ Cl	H ₂ O	1mg/ml (1,000ppm)	100ml
ICCB01	NH ₄ ⁺	NH ₄ Cl	H ₂ O	1mg/ml (1,000ppm)	500ml
Barium					
ICCU44	Ba ²⁺	Ba(NO ₃) ₂	H ₂ O	0.1mg/ml (100ppm)	100ml
ICCS44	Ba ²⁺	Ba(NO ₃) ₂	H ₂ O	1mg/ml (1,000ppm)	100ml
ICCB44	Ba ²⁺	Ba(NO ₃) ₂	H ₂ O	1mg/ml (1,000ppm)	500ml
Cadmium					
ICCU09	Cd ⁺	Cd Metal	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS09	Cd ⁺	Cd Metal	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB09	Cd ⁺	Cd Metal	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml

Product No.	Ion	Starting Material	Matrix	Concentration	Pack size
Calcium					
ICCU08	Ca ²⁺	Ca(NO ₃) ₂	H ₂ O	0.1mg/ml (100ppm)	100ml
ICCS08	Ca ²⁺	Ca(NO ₃) ₂	H ₂ O	1mg/ml (1,000ppm)	100ml
ICCB08	Ca ²⁺	Ca(NO ₃) ₂	H ₂ O	1mg/ml (1,000ppm)	500ml
Cesium					
ICCU91	Cs ⁺	CsNO ₃	H ₂ O	0.1mg/ml (100ppm)	100ml
ICCS91	Cs ⁺	CsNO ₃	H ₂ O	1mg/ml (1,000ppm)	100ml
ICCB91	Cs ⁺	CsNO ₃	H ₂ O	1mg/ml (1,000ppm)	500ml
Cobalt					
ICCU15	Co ²⁺	Co Metal	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS15	Co ²⁺	Co Metal	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB15	Co ²⁺	Co Metal	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml
Copper					
ICCU16	Cu ⁺	Cu Metal	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS16	Cu ⁺	Cu Metal	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB16	Cu ⁺	Cu Metal	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml
Iron					
ICCU12	Fe ²⁺	Fe(NO ₃) ₃	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS12	Fe ²⁺	Fe(NO ₃) ₃	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB12	Fe ²⁺	Fe(NO ₃) ₃	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml
Lead					
ICCU19	Pb ⁺	PbNO ₂	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS19	Pb ⁺	PbNO ₂	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB19	Pb ⁺	PbNO ₂	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml
Lithium					
ICCU02	Li ⁺	LiNO ₃	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS02	Li ⁺	LiNO ₃	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB02	Li ⁺	LiNO ₃	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml
Magnesium					
ICCU07	Mg ²⁺	Mg(NO ₃) ₂	H ₂ O	0.1mg/ml (100ppm)	100ml
ICCS07	Mg ²⁺	Mg(NO ₃) ₂	H ₂ O	1mg/ml (1,000ppm)	100ml
ICCB07	Mg ²⁺	Mg(NO ₃) ₂	H ₂ O	1mg/ml (1,000ppm)	500ml
Manganese					
ICCU11	Mn ²⁺	Mn	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS11	Mn ²⁺	Mn	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB11	Mn ²⁺	Mn	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml
Nickel					
ICCU14	Ni ²⁺	Ni Metal	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS14	Ni ²⁺	Ni Metal	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB14	Ni ²⁺	Ni Metal	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml
Potassium					
ICCU03	K ⁺	KNO ₃	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS03	K ⁺	KNO ₃	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB03	K ⁺	KNO ₃	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml
Rubidium					
ICCU92	Rb ⁺	RbNO ₃	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS92	Rb ⁺	RbNO ₃	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB92	Rb ⁺	RbNO ₃	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml

Product No.	Ion	Starting Material	Matrix	Concentration	Pack size
Sodium					
ICCU04	Na ⁺	NaNO ₃	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS04	Na ⁺	NaNO ₃	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB04	Na ⁺	NaNO ₃	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml
Strontium					
ICCU43	Sr ²⁺	Sr(NO ₃) ₂	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS43	Sr ²⁺	Sr(NO ₃) ₂	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB43	Sr ²⁺	Sr(NO ₃) ₂	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml
Zinc					
ICCU33	Zn ²⁺	Zn Metal	0.005% HNO ₃	0.1mg/ml (100ppm)	100ml
ICCS33	Zn ²⁺	Zn Metal	0.005% HNO ₃	1mg/ml (1,000ppm)	100ml
ICCB33	Zn ²⁺	Zn Metal	0.005% HNO ₃	1mg/ml (1,000ppm)	500ml

IC Multi-Element Standards

Product No.	Elements	Conc µg/ml	Matrix	Pack size
IC Multi-Element Standard, 5 Elements				
ICA-DX-51	Fl	20	H ₂ O	100ml
	Cl	30		
	NO ₃	100		
	PO ₄	150		
	SO ₄	150		
IC Multi-Element Standard, 6 Elements				
ICC-DX-611	Ca	1000	H ₂ O	100ml
	NH ₄	400		
	Na	200		
	K	200		
	Mg	200		
	Li	50		
IC Multi-Element Standard, 6 Elements				
ICC-DX-621	Li	50	H ₂ O	100ml
	Na	200		
	NH ₄	250		
	Mg	250		
	Ca	500		
	K	500		
IC Multi-Element Standard, 7 Elements				
ICA-DX-711	Fl	20	H ₂ O	100ml
	Cl	30		
	Br	100		
	NO ₂	100		
	NO ₃	100		
	PO ₄	150		
	SO ₄	150		
IC Multi-Element Standard, 7 Elements				
ICA-DX-721	PO ₄	200	H ₂ O	100ml
	Cl	100		
	Br	100		
	NO ₂	100		
	NO ₃	100		
	SO ₄	100		
	Fl	20		