

LOTTO 3 - STANDARD INORGANICI									
PERCENTUALE DI PRODOTTI RICHIESTA 80% DEI GRUPPI INDICATI (almeno 6 gruppi, per ciascun gruppo l'offerta deve essere del 100%)									
IMPORTO A BASE DI GARA TRIENNALE EURO 27.500,00									
N° gruppo	GRUPPO	PRODOTTO (molecola interessata o principio attivo)	SOLVENTE	Concentrazione/ Purezza richiesta	CONFEZIONI RICHIESTE	FORMATO RICHIESTO		Codice articolo	Catalogo
						VOLUME o PESO	U.M.		
		Soluzione Cloruri ION CROMATOGRAPHY Standard Solution	acqua	1000 µg/ ml	12	125	ml		
		Soluzione Solfato ION CROMATOGRAPHY Standard Solution	acqua	1000 µg/ ml	10	125	ml		
		Soluzione Nitrato ION CROMATOGRAPHY Standard Solution	acqua	1000 µg/ ml	12	125	ml		
		Soluzione Solfito ION CROMATOGRAPHY Standard Solution	acqua	1000 µg/ ml	3	125	ml		
		Nitrogen total standard solution	acqua	2,5 µg/ ml	3	250-500	ml		
		Nitrogen total standard solution	acqua	12 µg/ ml	3	250-500	ml		
		Nitrogen total standard solution	acqua	100 µg/ ml	3	250-500	ml		
		Mix Custom Standard 3 analiti, varie concentrazioni: Cloriti 10 Clorati 50 Bromati 2,0	acqua	CHLORITE 10µg/ml, BROMATE 2,0 µg/ml, CHLORATE 50µg/ml	3	125	ml		
		Ultracheck Minerals 9 analiti: (alcalinità, conducibilità, pH, chloride, fluoride, sulfate, nitrate, sodium, potassium)	acqua	variabile	4	500	ml		
		Multi Element Standard Solution (F-, CL-, NO2-, BR-, NO3-, PO4--,SO4--)	acqua	CONCENTRAZIONE VARIABILE: DA 5 A 30 MG/L	4	250	ml		
		Soluzione Nitriti ION CROMATOGRAPHY Standard Solution	acqua	1000 µg/ ml	6	125	ml		

1	ANIONI	Soluzione Clorati ION CROMATOGRAPHY Standard Solution	acqua	1000 µg/ ml	4	125	ml		
		Soluzione Cianuri ION CROMATOGRAPHY Standard Solution	acqua	1000 µg/ ml	4	125	ml		
		Soluzione Bromuri ION CROMATOGRAPHY Standard Solution	acqua	1000 µg/ ml	3	125	ml		
		Soluzione Bromati ION CROMATOGRAPHY Standard Solution	acqua	1000 µg/ ml	4	125	ml		
		Soluzione Ioduri ION CROMATOGRAPHY Standard Solution	acqua	1000 µg/ ml	3	125	ml		
		Multi Element Standard Solution (F-, CL-, NO3-, SO4--)	acqua	CONCENTRAZI ONI : F 1 mg/L; Cl 250 mg/L; NO3 50 mg/l ; SO4 250 mg/L	12	250	ml		
		Fosfato (crom. Ion.)	acqua	1000 µg/ml	8	125	ml		
		Soluzione Cloriti ION CROMATOGRAPHY	acqua	Cloriti 1000 µg/ml - ≥99%	4	125	ml		
		Soluzione Fluoruri ION CROMATOGRAPHY Standard Solution	acqua	1000 mg/ml	8	125	ml		
		Mix Custom Standard 3 analiti, varie concentrazioni: Cloriti 10 Clorati 50 Bromati 2,5	acqua	CHLORITE 10µg/ml, BROMATE 2,5 µg/ml, CHLORATE 50µg/ml	3	125	ml		
		Sodio	acqua	1000 µg/ml	8	125	ml		
		SODIUM STD x ICP, 10'000µG/ML, IN NITRIC ACID, 125	acido nitrico	10'000µg/ml	2	125	ml		
		Potassio	acqua	1000 µg/ml	8	125	ml		
		POTASSIO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	4	125	ml		
		Magnesio	acqua	1000 µg/ml	8	125	ml		
		MAGNESIO STD x ICP 10.000 µG/ML DILUITE IN HNO3, 125	acido nitrico	10.000µg/ml	4	125	ml		

2	CATIONI	Calcio	acqua	1000 µg/ml	8	125	ml		
		CALCIUM STD x ICP, 10'000µG/ML, IN NITRIC ACID	acido nitrico	10'000µg/ml	2	125	ml		
		Stronzio	acqua	1000 µg/ml - ≥99%	5	500	ml		
		STRONTIUM STD x ICP (1000 µG/ML), 125ML	HNO3 2-5%	1000 µg/ml	5	125	ml		
		Litio	acqua	1000 µg/ml - ≥99%	5	500	ml		
		LITIUM STD x ICP (1000 µG/ML), 125ML	acido nitrico	1000 µg/ml	4	125	ml		
		Ammonio (NH4)	acqua	1000 µg/ml	8	125	ml		
		Mix 6 cationi (es. 59384 di Absolute Standards)	acqua	Li 20µg/ml; Na 20µg/ml; NH4 20µg/ml; K 20µg/ml; Mg 40µg/ml; Ca 40µg/ml	2	125	ml		
		Standard multielementari per ICP-MS: Ca= 1000 mg/L, Mg= 1000 mg/L, Na= 1000 mg/L, K= 100 mg/L	2% HNO3	Ca= 1000 mg/L, Mg= 1000 mg/L, Na= 1000 mg/L, K= 100 mg/L	4	100	ml		
		Standard multielementari per ICP-MS: Ca= 20000 mg/L, Mg= 10000 mg/L, Na= 20000 mg/L, K= 2000 mg/L	2% HNO3	Ca= 20000 mg/L, Mg= 10000 mg/L, Na= 20000 mg/L, K= 2000 mg/L	5	100	ml		
3	PARAMETRI CHIMICI FISICI: CONDUCTIBILITA', DUREZZA, PH	CONDUCTIVITY Standard 147 µS/cm RS	acqua	147 µS/cm	4	500	ml		
		CONDUCTIVITY Standard 500 µS/cm RS	acqua	500 µS/cm	2	500	ml		
		CONDUCTIVITY Standard 1413 µS/cm RS	acqua	1413 µS/cm	14	500	ml		
		CONDUCTIVITY Standard 20000 µS/cm RS	acqua	20000 µS/cm	4	500	ml		
		CONDUCTIVITY Standard 12880 µS/cm NIST	acqua	12880 µS/cm	4	500	ml		
		CONDUCTIVITY Standard 50000 µS/cm RS	acqua	50000 µS/cm	3	500	ml		

		Durezza totale	acqua	conc. variabile ma dichiarata	3,00	500	ml		
		Buffer solution Ph 7 RS	acqua	PH 7	20,00	500	ml		
		Buffer solution Ph 4 RS	acqua	PH 4	20,00	500	ml		
		Buffer solution Ph 10 RS	acqua	PH 10	20	500	ml		
		Buffer solution Ph 7 RS	acqua	PH 7	2,00	10	litri		
4	TOC	Soluzione TOC	acqua	100 mg/L	4	500	ml		
		Soluzione TOC	acqua	5 mg/L	6	500	ml		
		Soluzione TOC	acqua	1 mg/L	7	500	ml		
5	COD	STD COD	acqua	1000 µg/ml COD	3	variabile (vol min 250 max 500 ml)	ml		
		Standard multielementari per ICP-MS: Al = 5 mg/l, Sb = 0.1 mg/l, As = 1 mg/l, Ba = 10 mg/l, Be = 1 mg/l, B = 10 mg/l, Cd = 0.1 mg/l, Cr = 1 mg/l, Co = 1 mg/l, Cu = 5 mg/l, Fe = 10 mg/l, Pb = 1 mg/l, Li = 5 mg/l, Mn = 2 mg/l, Ni = 1 mg/l, P = 10 mg/l.	2% HNO ₃	Al = 5 mg/l, Sb = 0.1 mg/l, As = 1 mg/l, Ba = 10 mg/l, Be = 1 mg/l, B = 10 mg/l, Cd = 0.1 mg/l, Cr = 1 mg/l, Co = 1 mg/l, Cu = 5 mg/l, Fe = 10 mg/l, Pb = 1 mg/l, Li = 5 mg/l, Mn = 2 mg/l, Ni = 1 mg/l, P = 10 mg/l.	3	100	ml		

		<p>Standard multielementari per ICP-MS:</p> <p>Al = 20 mg/l, Sb = 0.5 mg/l, As = 2.5 mg/l, Ba = 20 mg/l, Be = 2.5 mg/l, B = 20 mg/l, Cd = 0.5 mg/l, Cr = 2.5 mg/l, Co = 2.5 mg/l, Cu = 20 mg/l, Fe = 20 mg/l, Pb = 2.5 mg/l, Li = 20 mg/l, Mn = 20 mg/l, Ni = 2.5 mg/l, P = 20 mg/l.</p>	2% HNO ₃	<p>Al = 20 mg/l, Sb = 0.5 mg/l, As = 2.5 mg/l, Ba = 20 mg/l, Be = 2.5 mg/l, B = 20 mg/l, Cd = 0.5 mg/l, Cr = 2.5 mg/l, Co = 2.5 mg/l, Cu = 20 mg/l, Fe = 20 mg/l, Pb = 2.5 mg/l, Li = 20 mg/l, Mn = 20 mg/l, Ni = 2.5 mg/l, P = 20 mg/l.</p>	2	100	ml		
		<p>Standard multielementari per ICP-MS: Al = 5 mg/l, As = 1 mg/l, Ba = 10 mg/l, Be = 1 mg/l, B = 10 mg/l, Cd = 0.04 mg/l, Cr = 1 mg/l, Co = 1 mg/l, Cu = 5 mg/l, Fe = 10 mg/l, Pb = 0.5 mg/l, Li = 5 mg/l, Mn = 2 mg/l, Ni = 1 mg/l, P = 10 mg/l, Se = 1 mg/l, Sn = 1 mg/l, Sr = 5 mg/l, Ti = 1 mg/l, Ti = 1 mg/l, V = 1 mg/l, Zn = 10 mg/l</p>	2% HNO ₃	<p>Al = 5 mg/l, As = 1 mg/l, Ba = 10 mg/l, Be = 1 mg/l, B = 10 mg/l, Cd = 0.04 mg/l, Cr = 1 mg/l, Co = 1 mg/l, Cu = 5 mg/l, Fe = 10 mg/l, Pb = 0.5 mg/l, Li = 5 mg/l, Mn = 2 mg/l, Ni = 1 mg/l, P = 10 mg/l, Se = 1 mg/l, Sn = 1 mg/l, Sr = 5 mg/l, Ti = 1 mg/l, Ti = 1 mg/l, V = 1 mg/l, Zn = 10 mg/l</p>	4	125	ml		

6	STANDARD METALLI MULTIELEMENTARI	Standard multielementari per ICP-MS: Al = 20 mg/l, As = 2.5 mg/l, Ba = 20 mg/l, Be = 2.5 mg/l, B = 20 mg/l, Cd = 0.5mg/l, Cr = 2.5 mg/l, Co = 2.5 mg/l, Cu =20 mg/l, Fe = 20 mg/l, Pb = 2.5 mg/l, Li = 20 mg/l, Mn = 20 mg/l, Ni = 2.5 mg/l, P = 20 mg/l, Se = 2.5 mg/l, Sn =2.5 mg/l, Sr = 20 mg/l, Tl =2.5 mg/l, Ti = 2.5 mg/l, V =2.5 mg/l, Zn = 20 mg/l	2% HNO3	Al = 20 mg/l, As = 2.5 mg/l, Ba = 20 mg/l, Be = 2.5 mg/l, B = 20 mg/l, Cd = 0.5mg/l, Cr = 2.5 mg/l, Co = 2.5 mg/l, Cu =20 mg/l, Fe = 20 mg/l, Pb = 2.5 mg/l, Li = 20 mg/l, Mn = 20 mg/l, Ni = 2.5 mg/l, P = 20 mg/l, Se = 2.5 mg/l, Sn =2.5 mg/l, Sr = 20 mg/l, Tl =2.5 mg/l, Ti = 2.5 mg/l, V =2.5 mg/l, Zn = 20 mg/l	4	125	ml		
		EPA method 6020a calibration standard 22 analiti al 5%nitric acid: (aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, selenium, silver, sodium, thallium, vanadium, zinc)	acqua	20 µg/ml	4,00	125	ml		
		ICP-MS Calibration Standard #2 29 analiti: (aluminum, arsenic,barium, beryllium, bismuth,cadmium, calcium, cesium,chromium, cobalt, copper, gallium, indium, iron, lead, lithium, mgnesium, manganese, nickel, potassium, rubidium, selenium, silver, sodium, strontium, thallium, uranium, vanadium, zinc)	acqua	10 µg/ml	3,00	125	ml		

		Calibration Standard ICP-OES: (B, Ba, Fe, P, Sr = 100 mg/l) + (Be, Cr, Cu, Ni = 20 mg/l) + (Al, Pb = 50 mg/l) + (Mn, Zn = 10 mg/l) + Cd = 5 mg/l	acqua	(B, Ba, Fe, P, Sr = 100 mg/l) + (Be, Cr, Cu, Ni = 20 mg/l) + (Al, Pb = 50 mg/l) + (Mn, Zn = 10 mg/l) + Cd = 5 mg/l	2,00	250	ml		
		Lab fortifying Stock Solution 26 analiti: Al, Sb, As, Ba, B, Cr, Cu, Fe, Pb, Li, Mn, Ni, Se, Si, Sr, Ti, Zn 25µg/ml; Ag 2,5µg/ml; Be, 5µg/ml; Cd, Co, Mo, Sn, V 5µg/ml; P 50µg/ml	acqua	(Al, Sb, As, Ba, B, Cr, Cu, Fe, Pb, Li, Mn, Ni, Se, Si, Sr, Ti, Zn 25µg/ml); (Ag 2,5µg/ml); (Be, 5µg/ml); (Cd, Co, Mo, Sn, V 5µg/ml); (P 50µg/ml)	2,00	125	ml		
		Standard multielementari per ICP-MS: Al = 5 mg/l, As = 1 mg/l, Ba = 10 mg/l, Be = 1 mg/l, B = 10 mg/l, Cd = 0.04 mg/l, Cr = 1 mg/l, Co = 1 mg/l, Cu = 5 mg/l, Fe = 10 mg/l, Pb = 0.5 mg/l, Li = 5 mg/l, Mn = 2 mg/l, Ni = 1 mg/l, P = 10 mg/l, Se = 1 mg/l, Sr = 5 mg/l, Ti = 1 mg/l, V = 1 mg/l, Zn = 10 mg/l	2% HNO3	Al = 5 mg/l, As = 1 mg/l, Ba = 10 mg/l, Be = 1 mg/l, B = 10 mg/l, Cd = 0.04 mg/l, Cr = 1 mg/l, Co = 1 mg/l, Cu = 5 mg/l, Fe = 10 mg/l, Pb = 0.5 mg/l, Li = 5 mg/l, Mn = 2 mg/l, Ni = 1 mg/l, P = 10 mg/l, Se = 1 mg/l, Sr = 5 mg/l, Ti = 1 mg/l, V = 1 mg/l, Zn = 10 mg/l	3	125	ml		

		Mix 28 metalli ICP-MS: Aluminum,silver,arsenic,boron, barium,beryllium,bismuth, calcium,cadmium,cobalt, chromium, iron,copper,potassium,lithium, magnesium,manganese, molybdenum,sodium,nickel,lead, antimony,selenium,strontium, titanium,thallium,vanadium,zinc.	2% HNO3	100 mg/l per ogni analita	3	125	ml		
		Calibration Standard ICP-OES: (Co, Mo, Sn, Ti= 20 mg/l) + (As, Sb, Se, V = 10 mg/l)	acido nitrico	(B, Ba, Fe, P, Sr = 100 mg/l) + (Be, Cr, Cu, Ni = 20 mg/l) + (Al, Pb = 50 mg/l) + (Mn, Zn = 10 mg/l) + Cd = 5 mg/l	3	250	ml		
		Mix 28 metalli per ICP-MS: Aluminum,silver,arsenic,boron, barium,beryllium,bismuth, calcium,cadmium,cobalt, chromium, iron,copper,potassium,lithium, magnesium,manganese, molybdenum,sodium,nickel,lead, antimony,selenium,strontium, titanium,thallium,vanadium,zinc.	2% HNO3	1 mg/l per ogni analita	3	500	ml		
		IMS-105 ICP/MS Calibration Standard #5, Mercury	dilute HNO3	10 µg/ml	2	125	ml		
		Soluzione Std Calibration Standard Mercury	dilute HNO3	1000 ug/ml	6	250	ml		
		THALLIUM STD x ICP (1000 µG/ML), 125ML	HNO3 2-5%	1000µg/ml	2	125	ml		
		ARSENICO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	4	125	ml		
		BORO STD x ICP 1000µG/ML, 125ML	acqua	1000µg/ml	6	125	ml		
		BARIO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	6	125	ml		
		FERRO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	5	125	ml		

7	STANDARD METALLI SINGOLI	MOLIBDENO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	4	125	ml		
		MANGANESE STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	5	125	ml		
		CROMO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	6	125	ml		
		PIOMBO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	4	125	ml		
		SELENIO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	6	125	ml		
		VANADIO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	4	125	ml		
		ZINCO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	5	125	ml		
		ANTIMONIO STD x ICP 1000µG/ML, 125ML	HCl 20%	1000µg/ml	6	125	ml		
		NICHEL STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	4	125	ml		
		ALLUMINIO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	5	125	ml		
		Alluminio	acqua	1000 µg/ml - ≥99%	3	500	ml		
		Silice	acqua	1000 µg/ml - ≥99%	5	500	ml		
		Tin ICP Standard CertPur Merk referential material in acido cloridrico	acqua	1.000 µg/l	4	125	ml		
		SILICON STD x ICP, 1'000µG/ML, IN NITRIC ACID, 125	acido nitrico	1'000µg/ml	3	125	ml		
		COBALTO STD x ICP IN HNO3 (1000µG/ML), 125ML	acido nitrico	1000µg/ml	4	125	ml		
		FOSFORO STD x ICP IN HNO3 (1000µG/ML), 125ML	acido nitrico	1000µg/ml	4	125	ml		
		BERILLIO STD x ICP IN HNO3	acido nitrico	1000µg/ml	3	125	ml		
		CERIO STD x ICP IN HNO3	acido nitrico	1000µg/ml	3	125	ml		
		LUTETIUM AA STD IN HNO3	acido nitrico	1000µg/ml	4	125	ml		
		CADMIO STD x ICP	acido nitrico	1000µg/ml	3	125	ml		
		COPPER STD x ICP (1000 µG/ML), 125ML	acqua	1000 µg/ml	4	125	ml		

8	SOLUZIONI STANDARD INTERNI E DI TUNING	Ultra grade Solution Chromium (VI) ICP Standard	acqua	1000 µg/ml	6	125	ml		
		LANTANIO STD IN HNO3	acqua	1000 µg/ml	2	125	ml		
		Titanio x ICP	acqua	1000 µg/ml	4	125	ml		
		INDIO STD x ICP 1000µG/ML, 125ML	HNO3 2-5%	1000µg/ml	4	125	ml		
		Yttrio x ICP	acqua	1000 µg/ml	4	125	ml		
		Olmio x ICP	acqua	1000 µg/ml	2	125	ml		
		Scandio x ICP	acqua	1000 µg/ml	2	125	ml		
		Germanio x ICP	acqua	1000 µg/ml	2	125	ml		
		Rodio x ICP	acqua	1000 µg/ml	2	125	ml		
		Internal Standard Solution analiti in MATRIX 2% NITRIC ACID: (Scandium, yyyrium, indium, terbium, RODIO)	HNO3 2-5%	100 µg/ml	2	125	ml		
		Internal Standard Solution ICM-810 5 analiti in MATRIX 2% NITRIC ACID: (Scandium, yyyrium, indium, terbium, bismuth) epa Method 200.8	acqua	100 µg/ml	4	125	ml		
		Stock Tuning Solution 4 analiti 2% acido nitrico: (Li, Y, Ce, TI)	acqua	10 µg/ml	4	125	ml		
		ICP/MS TUNING SOLUTION Li, Mg,Y,Ce,TI,Co	acqua	1ppb	4	480	ml		