

**Quality control material - Clay loam soil (metals), normal analyte levels**

Art. ID AP-METRANAL-33  
Unit 80 g  
Deliverydetails No Dangerous Good /not restricted

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Dry mass at 105 °C	Arsenic (As)	[7440-38-2]	16,7	µg/g	Total element content	
Dry mass at 105 °C	Barium (Ba)	[7440-39-3]	495	µg/g	Total element content	
Dry mass at 105 °C	Beryllium (Be)	[7440-41-7]	2,18±0,16	µg/g	Total element content	
Dry mass at 105 °C	Cadmium (Cd)	[7440-43-9]	0,32±0,04	µg/g	Total element content	
Dry mass at 105 °C	Cobalt (Co)	[7440-48-4]	11,5±0,7	µg/g	Total element content	
Dry mass at 105 °C	Chromium (Cr)	[7440-47-3]	79,8±6,7	µg/g	Total element content	
Dry mass at 105 °C	Copper (Cu)	[7440-50-8]	29,1±0,8	µg/g	Total element content	
Dry mass at 105 °C	Mercury (Hg)	[7439-97-6]	0,096±0,014	µg/g	Total element content	
Dry mass at 105 °C	Manganese (Mn)	[7439-96-5]	600±37	µg/g	Total element content	
Dry mass at 105 °C	Nickel (Ni)	[7440-02-0]	31,3±1,5	µg/g	Total element content	
Dry mass at 105 °C	Lead (Pb)	[7439-92-1]	33,5±2,4	µg/g	Total element content	

Dry mass at 105 °C	Vanadium (V)	[7440-62-2]	76,2±6,4	µg/g	Total element content
Dry mass at 105 °C	Zinc (Zn)	[7440-66-6]	81,0±7,6	µg/g	Total element content
Dry mass at 105 °C	Arsenic (As)	[7440-38-2]	11,6±0,7	µg/g	Aqua regia extractable content according to ISO 11466 (1995)
Dry mass at 105 °C	Barium (Ba)	[7440-39-3]	146	µg/g	Aqua regia extractable content according to ISO 11466 (1995)
Dry mass at 105 °C	Beryllium (Be)	[7440-41-7]	1,29±0,13	µg/g	Aqua regia extractable content according to ISO 11466 (1995)
Dry mass at 105 °C	Cadmium (Cd)	[7440-43-9]	0,32±0,03	µg/g	Aqua regia extractable content according to ISO 11466 (1995)
Dry mass at 105 °C	Cobalt (Co)	[7440-48-4]	10,3±0,5	µg/g	Aqua regia extractable content according to ISO 11466 (1995)

Dry mass at 105 °C	Chromium (Cr)	[7440-47-3]	42,4±3,6	µg/g	Aqua regia extractable content according to ISO 11 466 (1995)
Dry mass at 105 °C	Copper (Cu)	[7440-50-8]	25,4±0,9	µg/g	Aqua regia extractable content according to ISO 11 466 (1995)
Dry mass at 105 °C	Mercury (Hg)	[7439-97-6]	0,093	µg/g	Aqua regia extractable content according to ISO 11 466 (1995)
Dry mass at 105 °C	Manganese (Mn)	[7439-96-5]	529±19	µg/g	Aqua regia extractable content according to ISO 11 466 (1995)
Dry mass at 105 °C	Nickel (Ni)	[7440-02-0]	28,8±1,2	µg/g	Aqua regia extractable content according to ISO 11 466 (1995)
Dry mass at 105 °C	Lead (Pb)	[7439-92-1]	25,2±1,1	µg/g	Aqua regia extractable content according to ISO 11 466 (1995)
Dry mass at 105 °C	Vanadium (V)	[7440-62-2]	52,9±2,7	µg/g	Aqua regia extractable

					le content according to ISO 11 466 (1995)
Dry mass at 105 °C	Zinc (Zn)	[7440-66-6]	69,4±1,8	µg/g	Aqua regia extractab le content according to ISO 11 466 (1995)
Dry mass at 105 °C	Arsenic (As)	[7440-38-2]	3,58	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Barium (Ba)	[7440-39-3]	101	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Beryllium (Be)	[7440-41-7]	0,95±0,02	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Cadmium (Cd)	[7440-43-9]	0,27±0,04	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Cobalt (Co)	[7440-48-4]	8,31±0,46	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Chromium (Cr)	[7440-47-3]	23,8±2,3	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Copper (Cu)	[7440-50-8]	20,6±1,2	µg/g	Extract by boiling 2 mol/l HNO 3

Dry mass at 105 °C	Mercury (Hg)	[7439-97-6]	0,054±0,008	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Manganese (Mn)	[7439-96-5]	476±28	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Nickel (Ni)	[7440-02-0]	22,2±1,1	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Lead (Pb)	[7439-92-1]	22,7±1,3	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Vanadium (V)	[7440-62-2]	25,3±2,8	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Zinc (Zn)	[7440-66-6]	54,2±2,3	µg/g	Extract by boiling 2 mol/l HNO 3
Dry mass at 105 °C	Arsenic (As)	[7440-38-2]	1,30±0,19	µg/g	Extract by cold 2 mo l/l HNO <sub>3</sub>
Dry mass at 105 °C	Barium (Ba)	[7440-39-3]	93,6	µg/g	Extract by cold 2 mo l/l HNO <sub>3</sub>
Dry mass at 105 °C	Beryllium (Be)	[7440-41-7]	0,69±0,05	µg/g	Extract by cold 2 mo l/l HNO <sub>3</sub>
Dry mass at 105 °C	Cadmium (Cd)	[7440-43-9]	0,23±0,01	µg/g	Extract by cold 2 mo l/l HNO <sub>3</sub>
Dry mass at 105 °C	Cobalt (Co)	[7440-48-4]	5,90±0,25	µg/g	Extract by cold 2 mo

					I/I HNO3
Dry mass at 105 °C	Chromium (Cr)	[7440-47-3]	9,06±0,67	µg/g	Extract by cold 2 mo I/I HNO3
Dry mass at 105 °C	Copper (Cu)	[7440-50-8]	15,8±0,3	µg/g	Extract by cold 2 mo I/I HNO3
Dry mass at 105 °C	Mercury (Hg)	[7439-97-6]	0,04	µg/g	Extract by cold 2 mo I/I HNO3
Dry mass at 105 °C	Manganese (Mn)	[7439-96-5]	435±19	µg/g	Extract by cold 2 mo I/I HNO3
Dry mass at 105 °C	Nickel (Ni)	[7440-02-0]	11,9±0,6	µg/g	Extract by cold 2 mo I/I HNO3
Dry mass at 105 °C	Lead (Pb)	[7439-92-1]	19,3±0,4	µg/g	Extract by cold 2 mo I/I HNO3
Dry mass at 105 °C	Vanadium (V)	[7440-62-2]	11,4±0,7	µg/g	Extract by cold 2 mo I/I HNO3
Dry mass at 105 °C	Zinc (Zn)	[7440-66-6]	24,4±0,9	µg/g	Extract by cold 2 mo I/I HNO3
dry weight, (% of the oxides)	SiO <sub>2</sub>		68,8	%	
dry weight, (% of the oxides)	Al <sub>2</sub> O <sub>3</sub>		12,3	%	
dry weight, (% of the oxides)	CaO		1,38	%	
dry weight, (% of the oxides)	MgO	[1309-48-4]	1,02	%	
dry weight, (% of the oxides)	Fe <sub>2</sub> O <sub>3</sub>		4,15	%	
dry weight, (% of the oxides)	K <sub>2</sub> O		2,21	%	
dry weight, (% of the oxides)	Na <sub>2</sub> O		0,74	%	

xides)			
dry weight, (% of the o	P2O5	0,16	%
xides)			
dry weight, (% of the o	TiO2	0,68	%
xides)			
at 900 °C	Loss on Ignition (LOI)	8,6	%