

# Powder CPP-23

## Analytical Methods

Weighing



Mineralization



Heating



Sample digester



Microwave

### Preparation and Digestion of CPP-23 Powder

Screening < 0.5 mm



Grinding



Air-dried



Washing



Reception

## Characterization

Kjeldahl method

Verification of Apparatus Using Glycerin Control

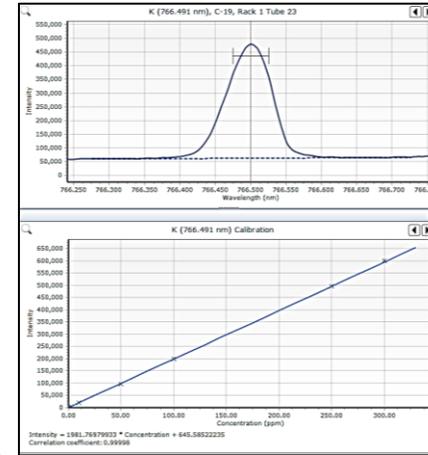
Control Setup

Control Analysis

Nitrogen Quantification

Distillation

Titration



### ICP-OES Method

Curve calibration ICP-OES, according to ISO 17034 standard for K, P, Ca, Na, Mg, Mn, Cu, Fe, Zn and B



### Evaluation of Inter-Laboratory Agreement

Heatmap of Z-scores by Laboratory and Parameter (CRM-CPP23)

	K	P	Ca	Na	Cu	Fe	Mn	Zn	Mg	B	
LAB1	-0.31	1.76	1.60	0.34	-1.18	-0.82	-0.78	0.80	0.40	0.04	0.80
LAB2	-0.57	0.10	1.10	0.38	-0.25	-0.11	-0.64	1.41	1.32	1.08	-1.39
LAB3	1.03	0.24	-0.12	1.21	-1.18	0.91	1.22	-0.04	0.11	-0.79	-0.64
LAB4	-1.74	-1.76	-0.76	-0.18	0.53	-0.19	-1.14	-0.58	1.69	-0.92	1.33
LAB5	0.61	-0.24	-0.45	-1.08	0.95	-1.37	1.08	0.27	-0.50	0.45	-0.05
LAB6	-0.06	0.89	-1.95	-0.31	0.87	2.09	0.54	0.28	-0.75	0.76	0.21
LAB7	2.62	0.04	0.08	-1.49	0.69	-0.24	-0.39	-0.99	-0.35	0.64	-0.67
LAB8	-0.31	-1.98	0.20	0.90	-0.44	0.50	0.14	-1.16	-1.26	-1.29	0.42

Assignment Values and Uncertainty Estimation



CRM CPP-23  
25 Grammes