



Specification

Certipur[®] Certified Reference Material

Manufacturer:	Merck KGaA, Frankfurter Str. 250, 64293 Darmstadt, Germany
Description of CRM:	ICP multi-element standard XIV
Art. No.:	1.09481.0500
Traceability:	Element standard solutions are measured applying high precision ICP-OES and are directly traceable to the corresponding NIST SRM[®] . <i>NIST: National Institute of Standards and Technology, Gaithersburg, USA.</i>
Minimum shelf life:	3 years
Matrix:	HCl 2%
Nominal value:	See table below
Specification:	See table below

The effective element mass fractions are measured lot specifically.
The certified effective mass concentrations and the measurement uncertainties are calculated and shown in the table below.

Element	<u>Specification</u> mg/l	<u>Uncertainty**</u> mg/l	NIST Standard Reference Material
As	18 - 22	± 2	SRM 3103a
K	90 - 110	± 10	SRM 3141a
La	18 - 22	± 2	SRM 3127a
Li	18 - 22	± 2	SRM 3129a
Mn	18 - 22	± 2	SRM 3132
Mo	18 - 22	± 2	SRM 3134
Na	18 - 22	± 2	SRM 3152a
Ni	18 - 22	± 2	SRM 3136
P	90 - 110	± 10	SRM 3139a
S	90 - 110	± 10	SRM 3154
Sc	18 - 22	± 2	SRM 3148a

****The measurement uncertainty can vary depending on the primary reference material.**