



Specification

Certipur[®] Certified Reference Material

Manufacturer:	Merck KGaA, Frankfurter Str. 250, 64293 Darmstadt, Germany
Description of CRM:	ICP multi-element standard VI
Art. No.:	1.10580.0100
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:	HNO ₃ 6%
Nominal value:	See table on page 2
Specification:	See table on page 2

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 on page 2.



Specification

Element	<u>Specification</u> mg/l	<u>Uncertainty**</u> mg/l	NIST Standard Reference Material
Ag	9.0 – 11.0	± 0.5	SRM 3151
Al	9.0 – 11.0	± 0.5	SRM 3101a
As	90 – 110	± 5	SRM 3103a
B	90 – 110	± 5	SRM 3107
Ba	9.0 – 11.0	± 0.5	SRM 3104a
Be	90 – 110	± 5	SRM 3105a
Bi	9.0 – 11.0	± 0.5	SRM 3106
Ca	900 – 1100	± 20	SRM 3109a
Cd	9.0 – 11.0	± 0.5	SRM 3108
Co	9.0 – 11.0	± 0.5	SRM 3113
Cr	9.0 – 11.0	± 0.5	SRM 3112a
Cu	9.0 – 11.0	± 0.5	SRM 3114
Fe	90 – 110	± 5	SRM 3126a
Ga	9.0 – 11.0	± 0.5	SRM 3119a
K	9.0 – 11.0	± 0.5	SRM 3141a
Li	9.0 – 11.0	± 0.5	SRM 3129a
Mg	9.0 – 11.0	± 0.5	SRM 3131a
Mn	9.0 – 11.0	± 0.5	SRM 3132
Mo	9.0 – 11.0	± 0.5	SRM 3134
Na	9.0 – 11.0	± 0.5	SRM 3152a
Ni	9.0 – 11.0	± 0.5	SRM 3136
Pb	9.0 – 11.0	± 0.5	SRM 3128
Rb	9.0 – 11.0	± 0.5	SRM 3145a
Se	90 – 110	± 5	SRM 3149
Sr	9.0 – 11.0	± 0.5	SRM 3153a
Te	9.0 – 11.0	± 0.5	SRM 3156
Tl	9.0 – 11.0	± 0.5	SRM 3158
U	9.0 – 11.0	± 0.5	SRM 3164
V	9.0 – 11.0	± 0.5	SRM 3165
Zn	90 - 110	± 5	SRM 3168a

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