



Specification

Certipur[®] Certified Reference Material

Manufacturer:	Merck KGaA, Frankfurter Str. 250, 64293 Darmstadt, Germany
Description of CRM:	ICP multi-element standard VIII
Art. No.:	1.09492.0100
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 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
Al	90 - 110	± 3	SRM 3101a
B	90 - 110	± 3	SRM 3107
Ba	90 - 110	± 3	SRM 3104a
Be	90 - 110	± 3	SRM 3105a
Bi	90 - 110	± 3	SRM 3106
Ca	90 - 110	± 3	SRM 3109a
Cd	90 - 110	± 3	SRM 3108
Co	90 - 110	± 3	SRM 3113
Cr	90 - 110	± 3	SRM 3112a
Cu	90 - 110	± 3	SRM 3114
Fe	90 - 110	± 3	SRM 3126a
Ga	90 - 110	± 3	SRM 3119a
K	90 - 110	± 3	SRM 3141a
Li	90 - 110	± 3	SRM 3129a
Mg	90 - 110	± 3	SRM 3131a
Mn	90 - 110	± 3	SRM 3132
Na	90 - 110	± 3	SRM 3152a
Ni	90 - 110	± 3	SRM 3136
Pb	90 - 110	± 3	SRM 3128
Se	90 - 110	± 3	SRM 3149
Sr	90 - 110	± 3	SRM 3153a
Te	90 - 110	± 3	SRM 3156
Tl	90 - 110	± 3	SRM 3158
Zn	90 - 110	± 3	SRM 3168a

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