



Certificate of Analysis

Certipur[®] Certified Reference Material

Producer:	Merck KGaA, Frankfurter Str. 250, 64293 Darmstadt, Germany
Accreditation:	The laboratory of Merck KGaA for reference materials in titrimetry is accredited as calibration laboratory according to DIN EN ISO/IEC 17025 .
Description of CRM:	Iron(II)ethylenediammonium sulfate
Ordering number:	1.02402.0080
Lot number:	132402L
Composition:	Iron(II)ethylenediammonium sulfate
Certified value and uncertainty:	99.85 % ± 0.05 % Mass fraction in weight percent with expanded measurement uncertainty The expanded measurement uncertainty U is calculated as $U = k \cdot u_{\text{characterisation}}$, where $k = 2$ is the coverage factor for a 95% coverage probability and $u_{\text{characterisation}}$ is the combined measurement uncertainty in accordance to DIN EN ISO/IEC 17025.
Method of analysis:	The certified mass fraction was determined by potentiometric titration with potassium permanganate as titration solution. The certified value is based on a molecular mass $M = 382.14$ g/mol dried substance.
Traceability:	This volumetric standard is directly traceable to the corresponding primary standard NIST SRM [®] di-sodium oxalate 8040. NIST: National Institute of Standards and Technology, Gaithersburg, USA.
Storage:	Store at +15 °C to +25 °C tightly closed in the original container and protect from light and moisture.
Application and correct use:	This volumetric standard is intended for standardisation of volumetric solutions in accordance to the chapter reagents of the Pharmacopoeia (Ph. Eur., USP). The volumetric standard iron(II)ethylenediammonium sulfate must be kept 24 hours in a desiccator above a drying agent with a moisture indicator before use.
Date of release:	2013/05/17
Minimum shelf life:	2016/05/31

Dr. Stefan Frey
(Laboratory Manager)