

QUALITY ASSURANCE TO EMPOWER YOUR LAB

Classical Inorganic Reagents and Solvents

At Merck, we don't just promise the highest quality. We prove it. Through stringent testing at our state-of-the-art labs. Through a sophisticated quality control process based on the integrated quality-management system ISO 9001. And through successful audits by regulatory bodies, official agencies, and our customers.

The result: you have the most reliable reagents and solvents to empower your work.

For more information on products and quality grades visit:
www.merckmillipore.com/empower

Three quality grades to empower all applications

EMSURE® – for analysis ACS, ISO, Reag. Ph Eur

Premium grade for complex or regulated analyses

EMPARTA® – for analysis ACS

Standard grade for routine analytical applications

EMPLURA®

Basic grade for preparative lab work, cleaning and production

**More than 600 different
specification parameters
regularly analyzed for classical
Inorganic Reagents and Solvents**

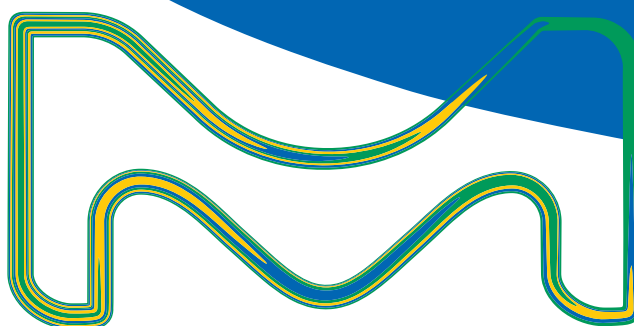


Our analytical competence

- Global network for production, QA/QC and distribution
- 48 production sites
- More than 1,000 experts in analytical quality control worldwide
- Exchange of expertise throughout global organization
- Most modern methods, equipment and IT systems
- EMSURE® products tested at Merck KGaA Center of Excellence in Darmstadt, Germany
- EMPARTA® and EMPLURA® products tested at our own labs close to production and filling site

Your analytical confidence

- High-quality reagents for almost all analytical applications
- Reliable, reproducible results
- Confidence in your application and analytical decisions
- No interference from impurities in your analysis
- Lower blank values resulting in higher sensitivity
- Certainty in method development
- Excellent batch to batch consistency
- Certificate of analysis (CoA) available online 24/7
- Compliance with international standards
- Simplified audits and accreditation



CENTER OF EXCELLENCE

Exclusive EMSURE® Testing Facility

- Dedicated quality control of all EMSURE® grade products
- Located at Merck KGaA headquarters in Darmstadt, Germany
- Includes 14 QC labs and 2 QA units in one organizational quality unit
- Approx. 160 highly qualified chemists, pharmacists, and lab technicians
- Quality control according to international standards
- Legal requirements and Merck's own rigorous criteria
- Each parameter of the specification is tested for each batch of product
- Compliance to current DIN EN ISO 9001 Standard



EMSURE® analytical methods

- Wet chemistry (incl. pharmaceutical methods)
- Volumetric titrations
- Colorimetry
- Reflectometry
- Photometry
- pH measurement
- Inorganic trace-analysis (ppm-range: ICP-OES, F-AAS)
- Inorganic ultra-trace-analysis (ppb/ppt range: ICP-MS)
- Special methods (mercury determination, voltammetry)
- GC for impurity profiles of all regulated products
- HPLC for impurity profiles of high purity solvents for gradient HPLC
- UV spectra down to the cut off
- Refractometry
- Total organic carbon down to ppb range
- TLC and color measurement
- Density measurement
- FT-NIR/MIR, Raman, X-ray
- Particle size distribution measurements (laser diffraction, sieving, single particle determination)

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of their parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

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