

GE Power & Water
Water & Process Technologies
Analytical Instruments

Sievers Certified Reference Materials and Consumables Catalog



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www.geinstruments.com

Sievers Certified Reference Materials and Consumables

For more than 20 years, thousands of customers worldwide have relied on Sievers® Total Organic Carbon (TOC) Analyzers, Certified Reference Materials (Sievers Standards), and Consumables for their critical TOC measurement needs. GE Analytical Instruments, the recognized world leader in designing and manufacturing TOC measurement technology, combines this expertise with the renowned Six Sigma methodology to ensure the finest quality in its standards and consumables. Sievers Standards and Consumables provide unmatched performance and reliability in the marketplace.

Sievers ready-to-use Standards are designed for calibration, validation, system suitability, and compendial test applications, and can be used with most other TOC analyzer brands. We also offer Certified (<10 ppb) TOC Vials, TOC Sample Vials for process monitoring, consumables, and replacement parts for Sievers TOC Analyzers.



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Sievers Standards Benefits

Certified and Traceable

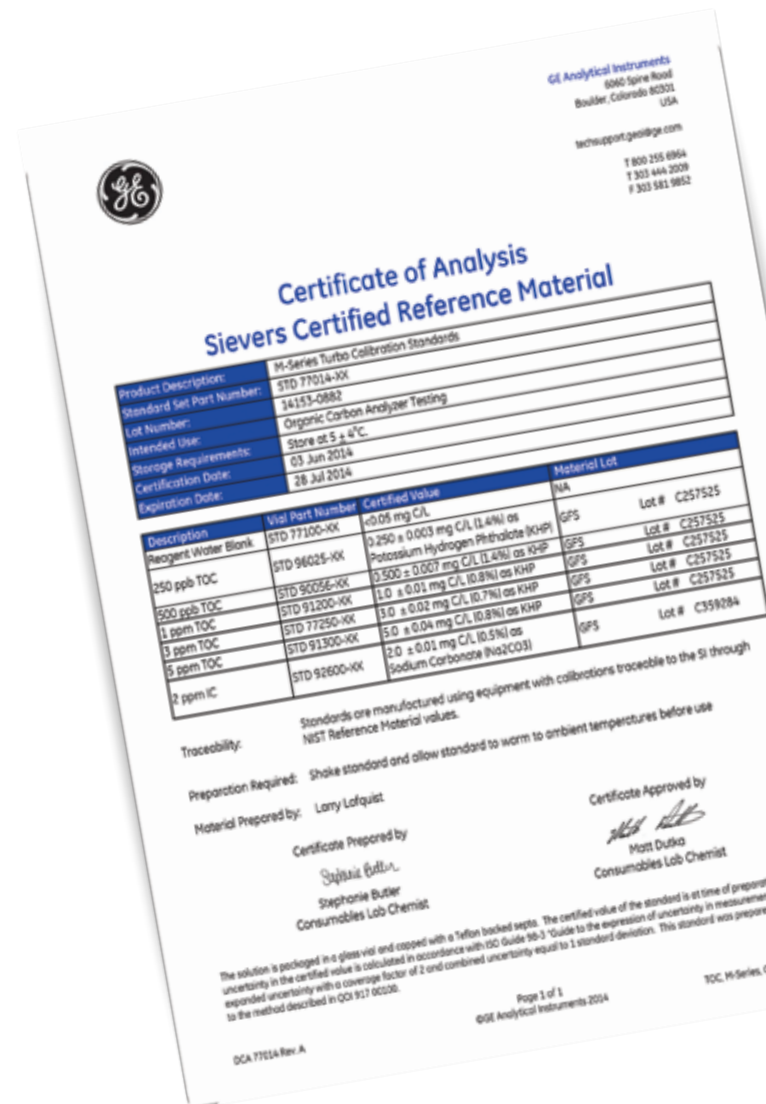
With extensive expertise in supporting the pharmaceutical market, GE Analytical Instruments understands how critical compliance and traceability are when using analytical standards. Documentation for our certified and traceable reference materials is important in supporting your data and building confidence in your measurement results. To provide a base for your internal documentation needs, we supply a Certificate of Analysis with each standard that documents source material traceability, the accuracy of the solution, and the statistical uncertainty of measurement associated with production.

To provide our customers with the highest level of confidence and the traceability they need, Sievers Standards are prepared from the highest purity raw materials available. Source materials for system suitability standards are traceable to the United States Pharmacopoeial Convention (USP). Materials for Japanese Pharmacopoeia testing comply with the required specifications for purity. Other standards for calibration and validation are traceable to National Institute of Standards and Technology (NIST) Reference Materials. In addition, laboratory equipment and glassware are traceable to NIST.

Stringent Quality Control

GE Analytical Instruments makes continuous advancements in the materials science, contamination control procedures, automated processes, and clean room conditions required to produce sensitive, low-level reference materials and consumables. GE Analytical Instruments:

- Prepares Sievers Standards in accordance with USP Chapter <643>, USP Chapter <645>, Ph. Eur. Method <2.2.44>, and JP Method <2.59>.
- Incorporates the world class Six Sigma methodology in an ISO 9001 environment with our manufacturing processes, while applying additional guidelines from ISO 17025 specific to reference material production.



- Produces Sievers Reference Materials in a class 100,000 clean room to minimize contamination. This standards manufacturing process is unique to the market.
- Uses only the highest grade raw materials (USP and NIST traceable) available which have undergone rigorous quality control.
- Limits human error by using advanced, custom-designed, automated manufacturing throughout production.

Value and Convenience

The Sievers Standards Production Lab (see page 7) not only allows GE Analytical Instruments to maintain the most rigorous TOC standards manufacturing process in the industry, but also enables us to produce standards on a large scale. As a result, our customers benefit from significant cost savings. Moreover, Sievers Standards are designed to maximize productivity when used with Sievers TOC Analyzers. With no preparation required and an extended shelf life, these ready-to-use materials are available when you need them. With the convenience of over-night delivery and confidence that comes with GE Analytical Instruments' guaranteed performance, Sievers Standards and Consumables are the logical choice for your business.

Flexible Ordering and Delivery

For your convenience, GE Analytical Instruments offers several programs and ordering methods to fit your needs. The Annual Blanket Standards Order allows you to minimize paperwork and delivery scheduling and save money. With a single purchase order, you can schedule a full year of standards shipments and rest assured they will arrive when needed. North American customers can also take advantage of our on-line store to conveniently order standards 24/7. (See page 8 for details on ordering.)

Sievers Standards for all TOC Instruments

The Sievers Standards product line is designed for all Sievers TOC instruments, as well as other instrument brands including Shimadzu, OI Analytical, Skalar, and Teledyne-Tekmar. Custom standards are also available on request. (See page 20 for additional information.)

■
Why risk the performance of your critical instrumentation and the quality of measurement when you can rely on Sievers Standards?

Guaranteed Consumables and Replacement Parts

GE Analytical Instruments provides consumables, reagents, and replacement parts that are certified and designed specific to our instrumentation.

As the Original Equipment Manufacturer we provide warranty options and guarantees on consumables reagents and parts quality.

Sievers Standards Products and Applications



GE Analytical Instruments can help you design a system suitability test program that meets your internal needs and satisfies compendial requirements.



Only GE Analytical Instruments offers a complete TOC validation standard set in alignment with ICH Q2 (R1) guidance.

System Suitability and Compendial Test Standards

System suitability sets are prepared in accordance with USP Chapter <643> and include 500 ppb 1,4-benzoquinone and sucrose solutions along with the associated reagent water blank. Sets are available for the Sievers M-Series, 500RL and CheckPoint TOC instruments. System suitability standards are also available for use with other manufacturers' TOC instruments. These standards allow users to comply not only with USP Chapter <643>, but also with European Pharmacopoeia (Ph. Eur.) <2.2.44>, Chinese Pharmacopoeia (CP) Appendix VIII R, and Indian Pharmacopoeia (IP) <2.59>.

The Japanese and Korean Pharmacopoeia require the use of SDBS (Sodium Dodecyl Benzene Sulfonate) as the challenge of the TOC method. GE Analytical Instruments is the first company to offer reference materials to support the new Japanese and Korean Pharmacopoeia TOC requirements.



Calibration and Verification Standards Sets

The purpose of instrument calibration is to minimize bias. Proper calibration is the critical first step to good instrument performance. Sievers Certified Reference Materials will ensure the optimal calibration of your TOC analyzer per GE Analytical Instruments recommendations.

GE Analytical Instruments offers a full line of TOC and conductivity calibration standards for a variety of instruments and applications. For on-line instruments designed exclusively for high-purity water applications, specially-prepared Sievers Conductivity Standards are available. For laboratory instruments, such as the Sievers M9, Sievers Calibration Sets include both inorganic carbon and total carbon standards.



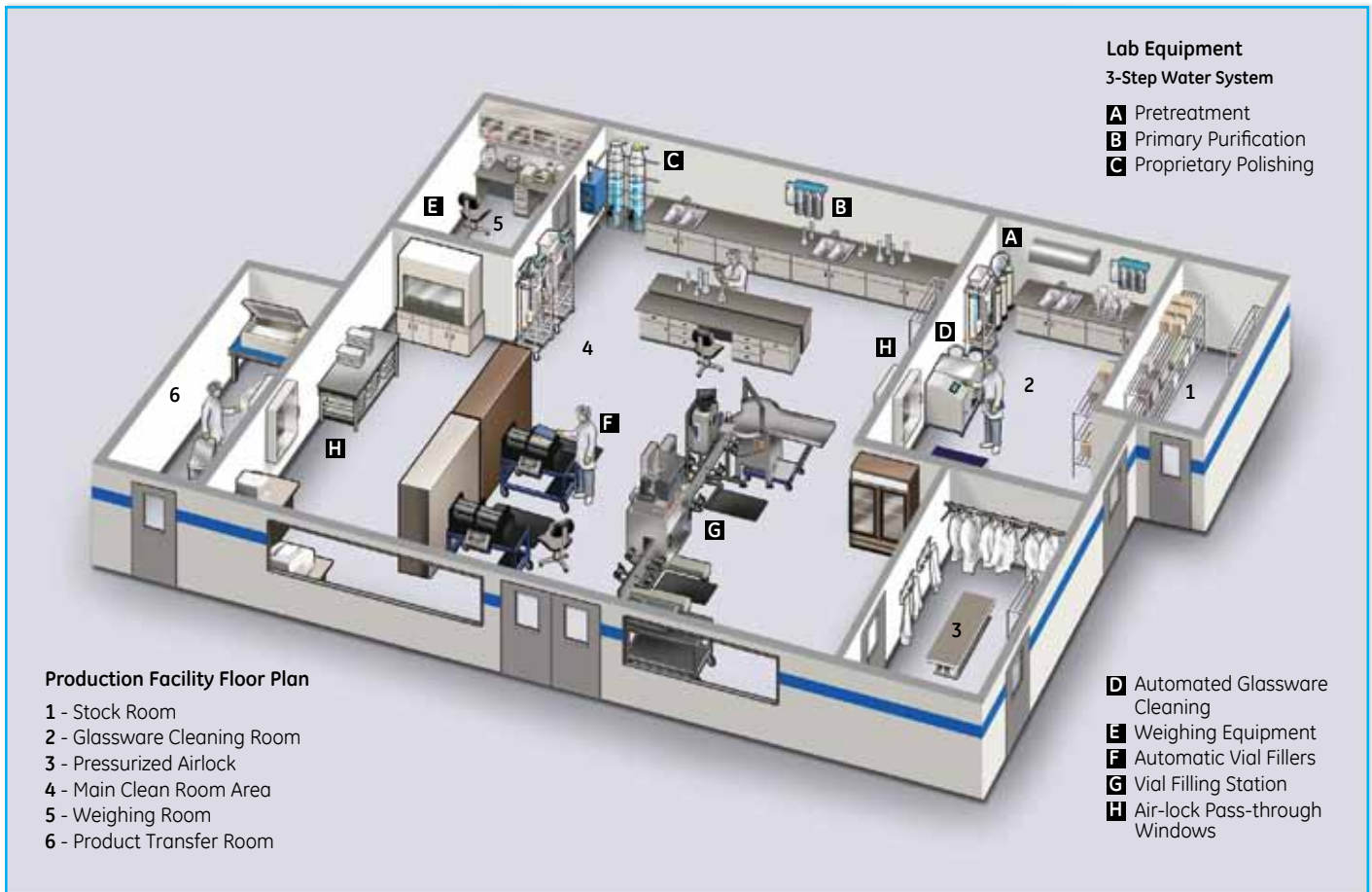
Verification Standards Sets

Verification standard sets are typically run if a change is made to the instrument or after maintenance. Calibration curve verification should be conducted on a regular basis with one or more standards within the linear range. GE Analytical Instruments offers a host of verification standards at concentrations across the operating range to demonstrate the accuracy and precision of the measurement system.

Validation Standards Sets

Validation standards are reference materials used for analytical instrument qualification. They help assure that the measurement system meets specifications and that it is suitable for its intended purpose. Validation is a critical component of a quality management system, cGMPs, and regulatory compliance.

The Sievers Validation Standards Sets comprehensively address LOD, LOQ, linearity, precision, accuracy, specificity, and robustness as detailed in Sievers validation documentation. Each standards set is specifically designed for the individual instrument and its application.



Sievers Standards Production Lab

Committed to the highest quality, GE Analytical Instruments manufactures Sievers Standards in a stringent cleanroom environment designed to Class 100,000 specifications and using ISO 9001 and 17025 guidelines. Cleanroom and manufacturing processes have been designed to minimize contamination risks at each step in the production of the standards, using rigorous contamination control protocols, proprietary glassware cleaning methods, and custom-designed automated equipment.



What to Expect from Sievers Standards and Consumables

- Premium performance and accuracy
- Certified, traceable, and guaranteed
- Convenient and available whenever you need them (next day delivery for most shipments)
- Savings in time, effort, operating budget, and avoidance of costly failures with these ready-to-use products

How To Order

The Americas

Tel: +1 800 255 6964 or +1 303 444 2009

Fax: +1 303-527 1797

Email: Send purchase orders to: orders@geinstruments.com

Web Store: <http://www.geinstruments.com/store>

Send general inquiries to: www.geinstruments.com/info

Office Hours: Monday through Friday, 10:00 am - 7:00 pm (EST)

Europe, Middle East and Africa

All Countries

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Fax: +44 (0) 161 864 6829

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Fax: +0800 296722

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Germany

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Fax: +0800 182 2248

Ireland

Tel: +1800 812734 or 353 876461756

Fax: +44 161 864 6829

Switzerland

Tel: +0800 895048 (German)

Tel: +0800 564486 (French)

Fax: +0800 890 198

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India

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Email: geai.india@ge.com

Japan

Email: geai.japan@ge.com

Credit Cards

We accept Visa, MasterCard, and American Express.

Rapid Shipping

Same day shipping is available for most products in North America and Europe.

GE Analytical Instruments can deliver your product throughout the world from one of our standards and consumables manufacturing facilities in the US, UK, China, and India.

Sievers Certified Reference Materials

The M-Series Analyzers offer unsurpassed ease of use, analytical performance, versatility, and reliability. Designed to meet diverse application needs and regulatory requirements, the M-Series is also fast, smart and versatile, allowing you to reach the peak of productivity. The M-Series is available in nine models—the Laboratory, the On-Line and the Portable versions of the M9 for the pharmaceutical industry, M9[®] for the semiconductor industry and M5310 C for the municipal water industry.

This section lists the most commonly ordered standards for the M-Series. See page 26—28 for a comprehensive list of Sievers Standards.

"We run two shifts in the QC laboratory to support the production of a multi-million dollar drug. We can't afford any mistakes with system suitability testing because it would slow down production. That's why we use Sievers Standards."

- Analytical Chemistry Manager, API Manufacturer



How often should I conduct a System Suitability Test?

The frequency of system suitability testing is at the user's discretion, and really depends on the level of risk the user is willing to accept. Some users do a System Suitability Test before and after each batch, and some do weekly or monthly checks depending on their risk assessment. GE Analytical Instruments can help you design a test program that meets your internal needs and satisfies compendial requirements.

GE Analytical Instruments is the first company to offer reference materials to support the Japanese and Korean Pharmacopoeia TOC requirements.



M9 Portable

Sievers M-Series

System Suitability and Compendial Standards

The United States Pharmacopeia (USP) Chapter <643>, European Pharmacopoeia (Ph. Eur.) Method <2.2.44>, Chinese Pharmacopoeia Appendix VIII R, and Indian Pharmacopoeia <2.4.30> requires the analysis of sucrose and benzoquinone to demonstrate system suitability for TOC analysis. The Japanese and Korean Pharmacopoeia requires the use of SDBS (Sodium Dodecyl Benzene Sulfonate) as the test compound. GEAI offers certified reference materials to meet these test needs.

The following are the most frequently used standards. For a full list, see pages 26–28.

When ordering kits, please use the applicable part number and quantity.

System Suitability—(40-mL vials)

Part #	Description	Applicability
STD KIT8D	Annual Pharmaceutical Standards Kit for Daily Testing 260 x CSTD 31004-01 (System Suitability Set)—10 sets shipped every two weeks. System Suitability Set includes (1) Rw - Reagent Water Blank, (1) Rs - Standard Solution, and (1) Rss - System Suitability Solution.	M9
STD KIT8W	Annual Pharmaceutical Standards Kit for Weekly Testing 52 x CSTD 31004-01 (System Suitability Set)—2 sets shipped every two weeks. System Suitability Set includes (1) Rw - Reagent Water Blank, (1) Rs - Standard Solution, and (1) Rss - System Suitability Solution.	M9
STD 31004-01	System Suitability Set Set includes three vials: (1) Rw - Reagent Water Blank, (1) Rs - 500 µg C/L as USP Sucrose and (1) Rss - 500 µg C/L as USP 1,4 Benzoquinone.	M9
STD 77004-01	Sterile Water Suitability Set includes three vials: (1) Rw - Reagent Water Blank, (1) Rs - 8 mg C/L as USP Sucrose and (1) Rss - 8 mg C/L as USP 1,4 Benzoquinone.	M9
STD 90039-01	SDBS Suitability Set Standard set to meet Japanese and Korean Pharmacopoeia requirements for TOC analysis. This set contains (2) 40 mL glass vial standards: (1) Reagent water, and (1) 500 mg C/L as SDBS.	M9

Sievers M-Series (continued)

TOC Calibration Sets

Multi-point Calibration Set—(40-mL vials)

Part #	Description	Applicability
STD 77000-01	M-Series Multi-point Calibration Standards Set—40-mL vials Set includes: (1) Reagent Water Blank, (6) TOC Standards (250 µg C/L, 1, 5, 10, 25, 50 mg C/L TOC as KHP), and (1) IC Standards (10 mg C/L IC as Na ₂ CO ₃).	All
STD 77014-01	M9, M9^e Turbo Multipoint Calibration Set Set includes: (1) Reagent Water Blank, (5) TOC Standards (250, 500 µg C/L, 1, 3, 5 mg C/L TOC (as KHP) and (1) IC Standard (2 mg c/L IC as Na ₂ CO ₃).	M9, M9 ^e

Single-point Calibration Standards Sets—(40-mL vials*)

Part #	Description	Applicability
STD 90001-01	Single-point Calibration Standards Set—1-mg/L Set includes: (1) Reagent Water Blank, (1) 1 mg C/L TOC Standard (as KHP), and (1) 1 mg C/L IC Standard (as Na ₂ CO ₃).	All
STD 90002-01	Single-point Calibration Standards Set—5-mg/L Set Includes: (1) Reagent Water Blank, (1) 5 mg C/L TOC Standard (as KHP) and (1) 5 mg C/L IC Standard (as Na ₂ CO ₃).	All
STD 90003-01	Single-point Calibration Standards Set—10-mg/L Set Includes: (1) Reagent Water Blank, (1) 10 mg C/L TOC Standard (as KHP) and (1) 10 mg C/L IC Standard (as Na ₂ CO ₃).	All
STD 77026-01	M9 Conductivity Calibration Standard Set includes: (1) 1.4 mS/cm (as KCl) in 30 mL specialty Dual Use Conductivity and TOC vial.	M9, M9 ^e



* Unless otherwise stated.

TOC Verification Sets

Verification Standards—(40-mL vials*)

Part #	Description	Applicability
STD 90007-01	Single-point Verification Set, 500 µg/L Set includes: (1) Reagent Water Blank, (1) 500 µg C/L TOC Standard (as Sucrose), and (1) 500 µg C/L IC Standard (as Na ₂ CO ₃).	All
STD 90008-01	Single-point Verification Set, 1 mg/L Set includes: (1) Reagent Water Blank, (1) 1 mg C/L TOC Standard (as Sucrose) and (1) 1 mg C/L IC Standard (as Na ₂ CO ₃).	All
STD 90009-01	M9 Turbo/Single Point Verification Set, 2 mg/L Set includes: (1) Rw Blank, (1) 2-mg C/L TOC Standard (as Sucrose), and (1) 2-mg C/L IC Standard (as Na ₂ CO ₃).	All
STD 90010-01	Single-point Verification Set, 5 mg/L Set includes: (1) Verification Blank, (1) 10 mg C/L TOC Standard (as Sucrose) and (1) 10 mg C/L IC Standard (as Na ₂ CO ₃).	All
STD 90011-01	Single-point Verification Set, 10 mg/L Set includes: (1) Verification Blank, (1) 10 mg C/L TOC Standard (as Sucrose) and (1) 10 mg C/L IC Standard (as Na ₂ CO ₃).	All
STD 90031	Municipal TOC Verification Set Set Includes: (1) 1 mg C/L, (1) 5 mg C/L and (1) 10 mg C/L as KHP standard.	M5310 C
STD 77200-01	M-Series Autoreagent Verification Set Set includes: (1) 10 mg C/L TOC Standard (as sucrose), and (1) 25 mg C/L IC Standard (as KHP).	All
STD 77030-01	M9 Conductivity Verification Standard Set includes: (1) 25 µS/cm (as HCl) in 30 mL specialty Dual Use Conductivity and TOC vial.	M9, M9 ^e

* Unless otherwise stated.

Sievers M-Series (continued)

TOC Validation Sets

Validation Standards—(40-mL vials)

Part #	Description	Applicability
STD 31013-01	Accuracy/Precision Set, 500 mg/L Set includes: (1) Reagent Water Blank and (1) 500 µg C/L (as USP Sucrose) Standard Solution.	M9, M9 ^e
STD 77013-01	Accuracy/Precision Set, 8 mg/L Set includes: (1) Reagent Water Blank and (1) 8 mg C/L (as USP Sucrose) Standard Solution.	M9
STD 77001-01	M9 Validation Set with Calibration and Verification Set includes: (1) Single Point Calibration Sets at 1 mg C/L, (1) Single Point Verification Set at 500 µg C/L, (2) System Suitability Sets, (1) Linearity Set, (1) Accuracy and Precision Set, (1) Robustness Set, and (1) Specificity Set	M9
STD 31012-01	Linearity Standards Set Set includes: (1) Reagent Water Blank and (1) each 250 µg C/L, 500 µg C/L, 750 µg C/L as USP Sucrose	M9, M9 ^e
STD 74409-01	Specificity Standards Set Set includes: (1) Reagent Water Blank, (1) 500 µg C/L as Methanol, (1) 500 µg C/L as Nicotinamide, and (1) 500 µg C/L as KHP.	M9
STD 90037-01	Robustness Standards Set Set includes: (1) Reagent Water Blank (Rw), (1) Standard Solution - Rs (500 µg C/L as USP Sucrose), and (1) System Suitability Solution - Rss (500 µg C/L as USP 1,4-Benzoquinone). Rw, Rs, and Rss standards are acidified.	M9

Certified TOC Sample Vials are also available for Sievers and other instruments. See page 28 for more information.



Sievers 500 RL and
500 RL^e On-Line
TOC Analyzers



Super Convenient Integrated Super iOS

With a Super iOS you plug in the combined standards pack, start your protocol, and walk away. Running the standards procedure has been completely automated.

Blanket Order Option

In addition to a full range of individual standard sets, we offer annual blanket orders at a discount that you can customize to meet your specific needs and have shipped at your desired intervals.

Sievers 500 RL Series

The Sievers 500 RL On-Line Total Organic Carbon (TOC) Analyzer is a reagentless analyzer designed to continuously monitor organics in ultrapure water for pharmaceutical, microelectronics, semiconductor, and power applications.

The 500 RL with Super iOS model offers standards unique to the Sievers product line. Our patented and convenient Super iOS vial set cartridges are pre-loaded with Sievers Standards and configured for a variety of protocols, including system suitability.

The Super iOS automatically sequences through the various vials for a protocol unattended. The Sievers Super iOS enables the confidence and reliability of lab-based system suitability testing in an on-line analyzer.

The following are the most frequently used standards. For a full list, see pages 26–28.

When ordering kits, please use the applicable part number and quantity.

Standards for the 500 RL with Super iOS

System Suitability and Compendial Standards—(40-mL vials)

Part #	Description
STD KIT5MS	<p>Annual Pharmaceutical Standards Kit for Monthly Testing Model 500 RL with Super iOS</p> <p>12 x CSTD 74503 (System Suitability Set) - Shipped one per month. System Suitability Set includes (1) Reagent Water Blank (Rw), (1) Standard Solution (Rs), and (1) System Suitability Solution (Rss). These standards are packaged in 40 mL glass vials, inserted in a vial cartridge for use with the Sievers Super iOS System.</p>
STD 74503	<p>500 RL System Suitability Set—Super iOS</p> <p>Set Includes (1) Reagent Water Blank - Rw, (1) Standard Solution - Rs (500 µg C/L as USP Sucrose), (1) Standard Solution - Rss (500 µg C/L as USP 1,4-Benzoquinone), and (1) Rinse Water Standard. Super iOS standards are packaged in 40 mL glass vials, inserted in a vial cartridge for use with the Sievers Super iOS System.</p>
STD 74529-01	<p>500 RL with Super iOS SDBS Suitability Set (TOC)</p> <p>Standard set for the Sievers 500 RL TOC Analyzer with Super iOS that meets the new Japanese and Korean Pharmacopoeia TOC requirements. Set includes: (2) 30 mL plastic vial standards: (1) Reagent Water Blank and (1) 500 µg C/L as SDBS standard. The set also includes (1) empty glass vial for alignment. These standards are packaged in a vial set cartridge for use with the Sievers Super iOS System.</p>

Sievers 500 RL Series (continued)

TOC and Conductivity Calibration Sets

Multi-point Calibration Set—(40-mL vials)

Part #	Description
STD 74514	500 RL with Super iOS Multi-point Calibration Set Multi-point Calibration Set A and B for Sievers 500 RL TOC Analyzer with Super iOS. Set includes: (1) Reagent Water Blank, (3) TOC Standards (500 µg C/L, 1.0 mg C/L, 1.5 mg C/L as KHP) and (1) 25 µS/cm Conductivity Standard (as HCl). These standards are packaged in a vial set cartridge for use with the Sievers Super iOS System.

Single Point Calibration Set—(40-mL vials and 30-mL vials)

Part #	Description
STD 74501	500 RL with Super iOS Single-point Calibration Set Single-point Calibration Set A for Sievers 500 RL TOC Analyzer with Super iOS. Set includes: (1) Reagent Water Blank, (1) 1.5 mg C/L TOC Standard (as KHP) and (1) 25 µS/cm Conductivity Standard (as HCl). These standards are packaged in a vial set cartridge for use with the Sievers Super iOS System.
STD 30030-01	Conductivity Standard Conductivity Standard for the Sievers 500 and CheckPoint Series. This standard consists of (1) 25 µS/cm as HCl solution in a 30 mL plastic vial.

Accuracy, Precision, and Verification Sets—(40-mL Vials)

Part #	Description
STD 74502	500 RL with Super iOS Accuracy, Precision and Verification Set Accuracy, Precision and Verification Set for the Sievers 500 RL TOC Analyzer with Super iOS. Includes (1) Reagent Water Blank, (1) 500 µg C/L TOC Standard (as NIST Sucrose) and (1) 25 µS/cm Conductivity Standard (as HCl). These standards are packaged in a vial set cartridge for use with the Sievers Super iOS System.
STD 74507	500 RL with Super iOS Accuracy, Precision and Verification Set (TOC Only) Accuracy/Precision and Verification Set for the Sievers 500 RL TOC Analyzer with Super iOS. Includes (1) Reagent Water Blank and (1) 500 µg C/L TOC Standard (as NIST Sucrose) packaged in a vial set cartridge for use with the Sievers Super iOS System. Not compatible with 500 RL instruments equipped with the conductivity option.

Validation Sets—(40-mL Vials)

Part #	Description
STD 74513	500 RL with Super iOS Single-point Validation Set Validation Standards Set with Single-point Calibration Set A for the Sievers 500 RL TOC Analyzer with Super iOS. Includes: (1) Single-point Calibration Set, (2) Accuracy, Precision and Verification Sets, (1) System Suitability Set, (1) Linearity Set, (1) Robustness Set, and (1) Specificity Set. These standards are packaged in a vial set cartridge for use with the Sievers Super iOS System.

Validation Sets (continued)

Part #	Description
STD 74515	<p>500 RL with Super iOS Multi-point Validation Set</p> <p>Validation Standards Set with Multi-point Calibration Set A and B for the Sievers 500 RL TOC Analyzer with Super iOS. Includes: (1) Multi-point Calibration Set, (2) Accuracy, Precision and Verification Sets, (1) System Suitability Set, (1) Linearity Set, (1) Robustness Set, and (1) Specificity Set. These standards are packaged in a vial set cartridge for use with the Sievers Super iOS System.</p>
STD 74506	<p>500 RL with Super iOS Linearity Set</p> <p>Linearity Set for the Sievers 500 RL TOC Analyzers with Super iOS. Includes, (1) Reagent Water Blank and (1) each 250 µg C/L, 500 µg C/L, and 750 µg C/L as KHP. These standards are packaged in a vial set cartridge for use with the Sievers Super iOS System.</p>
STD 74509-01	<p>500 RL with Super iOS Specificity Set</p> <p>Specificity Set for the Sievers 500 RL TOC Analyzers with Super iOS. Includes (1) Reagent Water Blank, (1) 500 µg C/L as Methanol, (1) 500 µg C/L as Nicotinamide, and (1) 500 µg C/L as KHP. These standards are packaged in a vial set cartridge for use with the Sievers Super iOS System.</p>
STD 74508-01	<p>500 RL with Super iOS Robustness Set</p> <p>Robustness Standard Set for the Sievers 500 RL TOC Analyzers with Super iOS. Includes (1) Reagent Water Blank - Rw, (1) Standard Solution - Rs (500 µg C/L as USP Sucrose), (1) System Suitability Solution - Rss (500 µg C/L as USP 1,4 Benzoquinone), and (1) Flush Standard. Rw, Rs, and Rss standards are non-acidified and are packaged in 30 ml HDPE vials. The Flush Standard is non-acidified and packaged in a 40 ml glass vial. These standards are packaged in a vial set cartridge for use with the Sievers Super iOS System.</p>

Standards for the 500 RL with Standard iOS

Part #	Description
STD 74403	500 RL System Suitability Set—Standard iOS
STD KIT5M	Annual Pharmaceutical Standards Kit for Monthly Testing—Standard iOS
STD 74429-01	500 RL SDBS Standard Set—Standard iOS
STD 74614	500 RL Multi-point Calibration Set—Standard iOS
STD 74401	500 RL Single-point Calibration Set A—Standard iOS
STD 74402	500 RL Accuracy, Precision and Verification Set—Standard iOS
STD 74613	500 RL Single-point Validation Set—Standard iOS
STD 74615	500 RL Multi-point Validation Set—Standard iOS
STD 74406	500 RL Linearity Set—Standard iOS
STD 74408-01	500 RL Robustness Set—Standard iOS
STD 74409-01	500 RL/900 Specificity Set—Standard iOS

CheckPoint Pharma and CheckPoint^e On-Line/Portable TOC Sensors



CheckPoint
Portable/On-Line TOC Sensor

The affordable CheckPoint Pharma and CheckPoint^e On-Line/Portable Total Organic Carbon (TOC) Sensors provide unsurpassed flexibility in measuring low-level total organic carbon (TOC) online for microelectronics, pharmaceutical and power applications. They can be used online for continuous monitoring or hand-carried to any point in a water system for rapid diagnostic sampling and troubleshooting. CheckPoint/CheckPoint^e is the first and only battery-powered TOC measuring device.

The following are the most frequently used standards for the CheckPoint. For the full list of standards, please see page 26–28.

When ordering, please use the applicable part number and quantity.

System Suitability Standards—(30-mL plastic vials)

Part #	Description
STD 31003-01	System Suitability Set Set includes: (1) Rw—Reagent Water Blank, (1) Rs—Standard Solution and (1) Rss—System Suitability Solution.

TOC and Conductivity Calibration Standards—(30-mL plastic vials)

Part #	Description
STD 97010-01	TOC Calibration Set Set includes: (1) Reagent Water Blank, and (1) 500 µg C/L as NIST sucrose.
STD 30030-01	Conductivity Standard Set includes: Conductivity Standard for the Sievers 500 RL and CheckPoint Series. This standard consists of a 25 µS/cm as HCl solution in a 30 mL plastic vial.

Performance Qualification Standards—(30-mL plastic vials)

Part #	Description
STD 97006-01	TOC Linearity Set Set includes: (1) Reagent Water Blank, and (1) each of 250 µg C/L, 375 µg C/L, and 500 µg C/L as sucrose.



InnovOx On-Line and Laboratory TOC Analyzers

InnovOx Laboratory and On-Line TOC Analyzers

The Sievers InnovOx Laboratory and On-Line Total Organic Carbon (TOC) Analyzers represent a true breakthrough in high TOC measurement technology and reliability. The InnovOx (short for innovative oxidation) can consecutively handle thousands of common—as well as difficult samples such as brine and cellulose—with unprecedented system uptime. The InnovOx offers unparalleled oxidation robustness, a dynamic linear working range of 0.5 to 50,000 ppm, and calibration curve stability for TOC analysis of process, environmental, and wastewater samples.

The following are the most frequently used standards for the InnovOx. For the full list of standards, please see page 26–28.

When ordering, please use the applicable part number and quantity.

TOC Calibration Standards—(250-mL bottles)

Part #	Description
STD 68310-01	Calibration—100-mg/L Set includes: (1) 250 mL bottle containing 100 mg C/L as KHP.
STD 68410-01	Calibration—1,000-mg/L Set includes: (1) 250 mL bottle containing 1,000 mg C/L as KHP.
STD 68450-01	Calibration—5,000-mg/L Set includes: (1) 250 mL bottle containing 5,000 mg C/L as KHP.
STD 68520-01	Calibration—20,000-mg/L Set includes: (1) 250 mL bottle containing 20,000 mg C/L as KHP.
STD 68100-01	Calibration—Reagent Water Set includes: (1) 250 mL bottle containing Reagent Water (<0.1 ppm at preparation).

TOC Calibration and Verification Standards—(250-mL bottles)

Part #	Description
STD 68020-02	Calibration and Verification Kit—0 to 1,000-ppm range Set includes: 250 ml bottles with the following standards: Calibration - Reagent Water, 1 mg C/L KHP, 10 mg C/L KHP, 25 mg C/L KHP, 100 mg C/L KHP, 1,000 ppm C/L KHP. Verification - 50 mg C/L Sucrose, 500 mg C/L Sucrose.
STD 68551-01	Calibration and Verification—50,000-mg/L Set includes: (1) 250 mL bottle containing 50,000 mg C/L Sucrose.

■ The Convenience of Ready-made Standards

Producing standards in-house that comply with regulations and quality systems can be a challenge. Organizations must consider and control many variables, such as:

- *Skilled, trained, and consistent performance of technicians*
- *Standard Operating Procedure (SOP) adherence and development*
- *Validated and well-maintained equipment*
- *Purity of reagent water*
- *Purity of raw material*
- *Cleaning and maintaining dedicated glassware*
- *Cleanliness of vials*
- *Documentation development and maintenance for NIST traceability, GLPs, and/or cGMPs*

Many organizations have eliminated these variables and the costs, time, and complexity associated with in-house standards production by using Sievers Certified Reference Materials. They benefit from having reliable, ready-to-use standards at hand as needed, eliminating potential production delays and reductions in throughput.

Standards for Non-Sievers Brand TOC Instruments

Sievers Standards are also compatible with most other laboratory-based TOC analyzers, such as:

- Shimadzu
- OI Analytical
- Skalar
- Teledyne-Tekmar

For more information, please contact us at geai@ge.com, or see page 8 for other options.

Custom Reference Materials for all TOC Instruments

If you need standards that are not listed, please contact us. We can produce any TOC reference material you may need.

To fulfill your custom standard set request, please provide the following information:

- Source material (USP/NIST, Sucrose, KHP, etc.) and desired concentration
- Instrument make/model for which the standard will be used
- Container — 40-mL glass vials
- Order Quantity (Minimum of ten sets per shipment or an additional fee may be required)

Please send your request to orders@geinstruments.com, or see page 8 for other contact options.

TOC Sample Vials, Containers, and Cleaning Validation Kits

GE CERTIFIED PLUS

Paragraph about what GE Certified Plus means. Paragraph about what GE Certified Plus means. Paragraph about what GE Certified Plus means. Paragraph about what GE Certified Plus means. Paragraph about what GE Certified Plus means.

The following are the most frequently used standards.

For the full list of consumables, reagents and replacement parts, please see page 26–28.



Sample Vials, Containers, and Cleaning Validation Kits

■ Sievers Certified (<10 ppb TOC) Vials

Sievers Certified (<10 ppb) TOC Vials are designed for use in critical pharmaceutical applications such as USP and EP Water testing as well as municipal water testing. Our certification to below 10 ppb gives you confidence in the quality of your TOC measurements. In addition, they are:

- Scrupulously cleaned in an ISO 9001 environment using a validated, automated process
- Manufactured by the global leader in TOC measurement technology and TOC standards
- Economical, with added savings on volume orders
- Reliable, with guaranteed performance

Sievers Certified TOC Vials are compatible with most TOC analyzer brands, including Sievers, Shimadzu, OI Analytical, Teledyne-Tekmar, and Skalar.



Part #	Description
HMI 77500-01	Certified Dual Use Conductivity & TOC Vials, 30-mL, 30-case Pre-cleaned and certified (<10 ppb TOC), no ionic leaching 30-mL specialty coated glass with caps and and specialty septa, 30 per case. These vials are suitable for Stage 1 conductivity measurements and simultaneous TOC compliance testing.
HMI 90606	Certified TOC Vials, 40-mL, 72-case Pre-cleaned and certified (<10 ppb TOC) 40-mL glass vials with caps and Teflon-lined septa, 72 per case. These vials are the right choice for strict regulatory compliance testing.
HMI 90207-01	Pre-cleaned 17-mL Glass Vials with Caps and Septa, 200-case Pre-cleaned 17-mL glass vials with caps and Teflon-lined septa, 200 per case. Certified to <10 ppb TOC. Vial dimensions: 18 mm x 100 mm.

■ GE TOC Sample Vials

For environmental, municipal, and process applications GE Analytical Instruments offers pre-cleaned 40-mL TOC sample vials. These vials are cleaned of organic residues with our advanced automated process in an ISO 9001 environment to ensure the quality of your TOC measurements. GE Analytical Instruments guarantees the performance of these vials.

Part #	Description
HMI 90707-01	40-mL Sample Vials, 72-case 40-mL glass vials with Teflon-lined septa, 72 per case. These are non-certified sample vials suitable for general process monitoring. They are guaranteed to <100 ppb TOC.

■ Additional Sample Containers

Part #	Description
HMI 90810-01	Pre-cleaned 60 mL glass vials with caps and septa, 72 per case. These Volatile Organic Analysis (VOA) vials are certified to meet EPA requirements. Vial dimensions: 26.5 mm x 144.5 mm. Teflon-lined septa thickness: 0.125" (3.2 mm).
HMI 90800-01	35-mL polypropylene test tubes for general sampling, 250 per case These uncleaned, disposable containers have a round bottom with an open top. The test tubes are autoclavable. Tube dimensions: 20 mm x 150 mm.
HMI 90303-01	30-mL Polysulfone Vials , 10 vials per pack. (1) pack containing 10 pre-cleaned 30-mL polysulfone vials. Caps and septa must be ordered separately as HMI 90224-01.
HMI 90224-01	Pre-cleaned bonded cap and septa for use with 30-mL Polysulfone vials (HMI 90303-01). 100 per pack.
STD 90090-01	Pre-acidified 40-mL TOC vials (HMI 90606) pretreated with phosphoric acid (20 µL of 85 wt% H ₃ PO ₄), 72 per case.

■ TOC Cleaning Validation Kits

Sievers TOC Cleaning Validation Kits feature low TOC background sampling swabs. Each kit includes (72) 40-mL Sievers Certified TOC Vials and 80 low TOC Alpha® Sampling Swabs. Alpha Sampling Swabs are manufactured and certified by the worldwide leader in critical cleaning products to assure extremely low-background TOC levels.

Part #	Description
APK 90600-01	Cleaning Validation Kit contains (72) Sievers Certified TOC Vials (<10 ppb TOC) and (80) Certified Sampling Swabs (<50 ppb TOC).
HMI 90600-01	Cleaning Validation Swab Kit contains (20) Certified Sampling Swabs <50 ppb TOC.

Consumables, Reagents, and Replacement Parts

GE Analytical Instruments manufactures consumable parts and reagents (acid and oxidizer) for use with TOC instrumentation. Our parts and reagents are designed and built to exact specifications for GE Analytical Instruments' analyzers and sensors.

To manufacture the purest reagent for TOC measurement and prevent any contribution of TOC, we use ultrapure water from our proprietary water system. We also manage raw material purity through rigorous testing and control. Lot records, TOC background testing, and quality controls are in place to limit contamination. Each reagent comes with a Certificate of Analysis.



The following are the most frequently used standards. For the full list of consumables, reagents and replacement parts, please see page 26–28.

When ordering kits, please use the applicable part number and quantity.

M-Series

Part #	Description
M9 MAINT	M-Series Consumable Kit 12-month Consumables Kit for the Sievers M-Series. Includes (4) Persulfate Reagents (150mL EA), (2) Acid Reagents, (2) UV Lamps, (1) Pump Tubing, and (1) Ion Exchange Resin Bed. Items delivered and billed on a quarterly schedule.
APF 90310-02	Acid Cartridge 300-mL Acid Reagent Cartridge for the Sievers M-Series, 900 and 5310 C Series. Replacement recommended after 6 months.
APF 90150-02	Oxidizer Cartridge, Low-capacity Low-capacity, 150-mL, Oxidizer Reagent Cartridge for the Sievers M-Series. Replace after 3 months of use.
APF 90300-02	Oxidizer Cartridge, High-capacity High-capacity, 300-mL, Oxidizer Reagent Cartridge for the Sievers M-Series. Replace after 3 months of use.
ARK 35010-01	UV Lamp, Replacement UV Lamp for the Sievers M-Series; Lifetime of lamp is 6 months of operation.
ASM 77250-01	M-Series Resin Bed Replacement Replacement Resin Cartridge for the Sievers M-Series Analyzers.
APK 77207-01	M-Series Sample Pump Heads 2 Replacement Pump Heads for the Sievers M-Series Analyzers.
APK 43030-01	Degasser, Closed Chamber Degassing Module for Inorganic Carbon Remover (ICR) used with M9, M9 ^e , 900 Series and 5310 C Laboratory & Portable units.
APK 43040-01	Degasser, Open Chamber Degassing Module for the Inorganic Carbon Remover (ICR) used with the M5310 C Series and 5310 C On-Line units.

500 RL Series

Part #	Description
ARK 35010-01	UV Lamp, Replacement UV Lamp for the Sievers PPT, 500 Series, and CheckPoint; Average Lamp life is 6 months of operation.
APK 74160	500 RL DI Reservoir/Resin Replacement DI Reservoir/Resin Replacement part. This part is a consumable that needs to be replaced every two years. The part is the DI Reservoir with the Resin.
APK 74017-01	500 RL Sample Pump Kit 2 Replacement Sample Pump Heads for 500 Series Analyzers.

Consumables, Reagents, and Replacement Parts (continued)

The following are the most frequently used consumables, reagents, and replacement parts. For the full list, please see page 28.

When ordering kits, please use the applicable part number and quantity.

InnovOx Series

Part #	Description
APK 68050-01	Reagent, Na₂S₂O₈, 6-pack Kit contains six pouches of dry sodium persulfate reagent. Each pouch makes 2L of 30% sodium persulfate solution.
APK 68051-01	Reagent, Na₂S₂O₈, Single-pack Kit contains one pouch of dry sodium persulfate reagent. The pouch makes 2L of 30% sodium persulfate solution. This kit is provided with new instrument shipments.
SCH 68110-01	3M Hydrochloric Acid—2.5L 3N HCl acid container for the InnovOx Analyzer. This 2.5L reagent container can only be purchased and shipped in Europe, the Middle East, and Africa.
SCH 68100-01	Hydrochloric Acid, 3N, 500-ml 0.5 liters of 3M HCl acid reagent for the InnovOx Analyzer. This container is drop shipped to the customer's location within North America only.
APK 68120-01	Kit, Air Purifier, InnovOx Replacement Air Filter Cartridge for the optional air filter system.
APK 68205-01	Kit, Sample Reactor Pump Head, InnovOx Replacement Peristaltic Pump Head for the InnovOx Analyzer. Used on sample pump or reactor pump.

Checkpoint and CheckPoint^e

Part #	Description
ARK 35001-01	UV Lamp, Replacement UV Lamp for the CheckPoint. Average lamp life is 6 months of operation.
APK 97010-01	CheckPoint Consumables Kit (2) UV Lamps, and (2) Pump heads.
APK 97000-01	Pump Head Kit Sample Pump Head Assembly Kit for the CheckPoint.

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Sievers Certified Reference Materials

TOC Sample Vials, Containers, Cleaning Validation Kits

Consumables, Reagents, and Replacement Parts

Product Index

Sievers Certified Reference Materials and Reagents

Part #	Description	Model	Part #	Description	Model
STD 74401	500 RL Single-point Calibration Set A	500 RL	STD 77014-01	M9/M9 [®] Turbo Multipoint Calibration Set	M9
STD 74402	500 RL Accuracy/Precision/Verification Set	500 RL	STD 77026-01	M9 Conductivity Calibration	M9
STD 74403	500 RL System Suitability Set	500 RL	STD 77030-01	M9 Conductivity Verification	M9
STD 74405	500 RL Single-point Cal. Set A (TOC Only)	500 RL	STD 77001-01	M9 Validation Set with Cal/Ver	M9
STD 74406	500 RL Linearity Set	500 RL	STD 77100-01	Reagent Water Blank—Rw	M-Series/900
STD 74407	500 RL Acc/Prec/Ver Set (TOC Only)	500 RL	STD 90000-01	900 Multipoint Calibration	900
STD 74408-01	500 RL Robustness Set	500 RL	STD 90001-01	Single-pt. Calibration, 1 mg/L	M-Series/900
STD 74409-01	Specificity Set	500 RL/M9	STD 90002-01	Single-pt. Calibration Set, 5 mg/L	M-Series/900
STD 74429-01	500 RL SDBS Suitability Std Set (TOC)	500 RL	STD 90003-01	Single-pt. Calibration Set, 10 mg/L	M-Series/900
STD 74501	500 RL Super iOS Single-point Cal. Set A	500 RL	STD 90004-01	Single-pt. Calibration Set, 25 mg/L	M-Series/900
STD 74502	500 RL Super iOS Acc/Prec/Ver Set	500 RL	STD 90005-01	Single-pt. Calibration Set, 50 mg/L	M-Series/900
STD 74503	500 RL Super iOS System Suitability	500 RL	STD 90007-01	Single-pt. Verification Set, 500 µg/L	M9/900
STD 74505	500 RL Super iOS Single-pt. Cal. A (TOC Only)	500 RL	STD 90008-01	Single-pt. Verification Set, 1 mg/L	M-Series/900
STD 74506	500 RL Super iOS Linearity Set	500 RL	STD 90009-01	Single-pt. Verification Set, 2 mg/L	M-Series/900
STD 74507	500 RL Super iOS Acc/Prec/Ver (TOC Only)	500 RL	STD 90010-01	Single-pt. Verification Set, 5 mg/L	M-Series/900
STD 74508-01	500 RL Super iOS Robustness Set	500 RL	STD 90011-01	Single-pt. Verification Set, 10 mg/L	M-Series/900
STD 74509-01	500 RL Super iOS Specificity Set	500 RL	STD 90012-01	Single-pt. Verification Set, 25 mg/L	M-Series/900
STD 74512	500 RL Super iOS Single-pt. Cal. A/Ver	500 RL	STD 90013-01	Single-pt. Verification Set, 50 mg/L	M-Series/900
STD 74513	500 RL Super iOS Single-pt. Validation	500 RL	STD 90037-01	Robustness Set	M9/900
STD 74514	500 RL Super iOS Multi-pt. Cal. Set A&B	500 RL	STD 90039-01	SDBS Suitability Standard Set	M9/900
STD 74515	500 RL Super iOS Multi-pt. Validation	500 RL	STD 90044-01	System Suit + RS	M9/900
STD 74516	500 RL Super iOS Multi-pt. Cal. A&B/Ver	500 RL	STD 90046-01	TOC KHP Set, 1 mg/L	M9/900
STD 74522	500 RL SiOS Single-pt. Cal/Ver (TOC Only)	500 RL	STD 90048-01	Extended Linearity	M9/900
STD 74524	500 RL SiOS Multi-pt. Cal. Set (TOC Only)	500 RL	STD 90049-01	Sucrose Set, RW + 2 RS	M9/900
STD 74526	500 RL SiOS Multi-pt. Cal/Ver (TOC Only)	500 RL	STD 90050-02	Sucrose Set, 4 RS	M9/900
STD 74527-01	500 RL Super iOS Rinse Vial Set	500 RL	STD 90051-01	RW, 1 mg/L + 10 mg/L KHP	M9/900
STD 74529-01	500 RL Super iOS SDBS Suitability (TOC)	500 RL	STD 90052-01	System Suit + 1 mg/L KHP	M9/900
STD 74612	500 RL Single-pt. Cal/Ver Set	500 RL	STD 90054-01	System Suit Cleaning Validation	M9/900
STD 74613	500 RL Single-pt. Validation Set	500 RL	STD 90055-01	Cleaning Validation Verification	M9/900
STD 74614	500 RL Multi-pt. Calibration Set A & B	500 RL	STD 30002-01	IC Standard, 25 mg/L	M-Series/900
STD 74615	500 RL Multi-pt. Validation Set	500 RL	STD 30004-01	Standard Solution—Rs	M9/900
STD 74616	500 RL Multi-pt. Cal. A&B/Ver Set	500 RL	STD 30008-01	System Suit Solution—Rss	M9/900
STD 74622	500 RL Single-pt. Cal/Ver Set TOC Only	500 RL	STD 31004-01	System Suitability Set	M9/900
STD 74624	500 RL Multi-pt. Cal. Set A&B (TOC Only)	500 RL	STD 31012-01	Linearity Standard Set	M9/900
STD 74626	500 RL Multi-pt. Cal/Ver Set (TOC Only)	500 RL	STD 31013-01	Accuracy and Precision Set, 500 mg/L	M9/900
STD 30030-01	500/CheckPoint Conductivity Std	500 RL/CheckPoint	STD 31015-01	1.25 mg/L Sucrose	M9/900
STD KIT5M	Annual Pharma Stds Kit, 5-monthly	500 RL	STD 77013-01	Accuracy and Precision Set, 8 mg/L	M9/900
STD KIT5MS	Annual Pharma Stds Kit, 5-monthly SiOS	500 RL	STD 77004-01	Sterile Water Suitability	M9/900
STD KIT5Q	Annual Pharma Stds Kit, 5-quarterly	500 RL	STD KIT8D	Annual Pharma Stds Kit, 8-daily	M9/900
STD KIT5QS	Annual Pharma Stds Kit, 5-quarterly SiOS	500 RL	STD KIT8M	Annual Pharma Stds Kit, 8-monthly	M9/900
STD KIT5W	Annual Pharma Stds Kit, 5-weekly	500 RL	STD KIT8Q	Annual Pharma Stds Kit, 8-quarterly	M9/900

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Sievers Certified Reference Materials and Reagents

Part #	Description	Model
STD KIT8W	Annual Pharma Stds Kit, 8-weekly	M9/900
STD 77000-01	M-Series Multipoint Calibration Set	M-Series
STD 77200-01	M-Series Autoreagent Verification Set	M-Series
STD 90031	Municipal TOC Verification Set	M5310 C/5310 C
STD 96000-01	5310 C MP Calibration Set	5310 C
STD 90014-01	900 Turbo Calibration Set, 4 mg/L	900
STD 90015-01	900 Turbo Verification Set, 4 mg/L	900
STD 90034	900 Autoreagent Verification Set	900
STD 90036	900 Autoreagent Calibration Set	900
STD 31003-03	CheckPoint System Suitability Set	CheckPoint
STD 97006-01	CheckPoint TOC Linearity Set	CheckPoint
STD 97010-01	CheckPoint TOC Calibration Set	CheckPoint
STD 68020-02	InnovOx 0-1,000 ppm Cal. and Ver.	InnovOx
STD 68050-01	InnovOx TOC Service Kit	InnovOx
STD 68100-01	InnovOx Reagent Water	InnovOx
STD 68310-01	InnovOx TOC Calibration 100 mg/L	InnovOx
STD 68410-01	InnovOx TOC Calibration 1,000 mg/L	InnovOx
STD 68450-01	InnovOx TOC Calibration 5,000 mg/L	InnovOx
STD 68520-01	InnovOx TOC Calibration 20,000 mg/L	InnovOx
STD 68551-01	InnovOx TOC Cal/Ver 50,000 mg/L	InnovOx

TOC Sample Vials, Containers, Cleaning Validation Kits

Part #	Description	Model
HMI 90606	Certified TOC Vials, 40 mL, 72-case	Multiple
HMI 90207-01	Pre-cleaned, 17 mL Glass Vials with Caps	Multiple
APK 90600-01	Cleaning Validation Kit	Multiple
STD 90090-01	Pre-acidified vials, 72-case	Multiple
HMI 77500-01	Dual Use Conductivity & TOC Vials, 72-case	M9
HMI 90707-01	40 mL Sample Vials, 72-case	Multiple
HMI 90303-01	Polysulfone Vials, 10-pack	Multiple
HMI 90810	Pre-cleaned, 60 mL Glass Vials	InnovOx
HMI 90800	Polypropylene Test Tubes, 35 mL	InnovOx

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Consumables, Reagents, and Replacement Parts

Part #	Description	Model	Part #	Description	Model
APK 74017-01	500 RL Sample Pump Kit	500 RL	APK 97000-01	Pump Head Assembly Kit	CheckPoint
HMI 89070	Epson Thermal Printer Paper	Multiple	APK 97010-01	Consumables Kit	CheckPoint
APK 74160	500 RL DI Reservoir/Resin Replacement	500/900	APK 97310-01	Filter Element Kit	CheckPoint
APK 77207-01	M-Series Sample Pump Heads	M-Series	EMI 20240-01	Spare Battery	CheckPoint
ARK 35010-01	UV Lamp Replacement	M-Series/900	APK 68250-01	InnovOx, Sample/Reactor Pump Head	InnovOx
		500/CheckPoint	APK 68050-01	InnovOx Oxidizer Reagent, 6-pack	InnovOx
APK 96510-02	GE AS Needle Assembly Kit	M-Series/900	APK 68051-01	InnovOx Oxidizer Reagent, Single	InnovOx
HTF 94401	In-Line SS Filter 60 micron	M-Series/900	APK 68100-01	InnovOx, Pinch Tubing Kit, Lab	InnovOx
HTF 94402	Replacement Filter 60 micron	M-Series/900	APK 68110-01	InnovOx Reactor Seal Kit	InnovOx
APF 90150-02	Oxidizer Cartridge, 150 mL	M-Series/900	APK 68120-01	InnovOx, Air Filter Cartridge	InnovOx
APF 90300-02	Oxidizer Cartridge, High Capacity 300 mL	M-Series/900	ASM 68500-01	InnovOx Autosampler Needle Kit	InnovOx
APF 90310-02	Acid Cartridge	M-Series/900	ATU 68500-01	InnovOx Autosampler Tubing Kit	InnovOx
APF 90311-01	Acid Cartridge, Semi Only	M-Series/900	HFL 68100-01	InnovOx, NDIR Filter	InnovOx
ACT 77080-01	ICR Chemical Trap, M-Series	M-Series	APK 68996-01	InnovOx, 100-Mesh Fine Screen Disc	InnovOx
ASM 77250-01	Resin Bed, M-Series	M-Series	APK 68997-01	InnovOx 20-Mesh Coarse Screen	InnovOx
M9 MAINT	12-month M-Series Consumables Kit	M-Series	SCH 68100-01	InnovOx, 0.5L Acid (N. America Only)	InnovOx
APK 43030-02	Degasser, Closed Chamber	M9/900 ICR	SCH 68110-01	InnovOx, 2.5L Acid (Europe Only)	InnovOx
APK 43040-02	Degasser, Open Chamber	M9/900 ICR	ASM 71220-01	Boron Reagent Refill	Boron
HFL 00081	Capsule Filter, High Capacity, 40 micron	M5310 C/5310 C	ASM 71235-01	Boron Pump Tubing	Boron
HFL 61000-01	Cartridge Filter, 50 micron	M5310 C/5310 C	ASM 71255-01	Boron Set of Columns	Boron
HFL 61010-01	Bag Filter, PPE, 50 micron	M5310 C/5310 C	ASM 71260-01	Boron Zero Column	Boron
900 MAINT	12-month 900 Series Consumable Kit	900	ASM 71265-01	Boron Reagent Column	Boron
ACT 00070-02	ICR Chemical Trap, 900	900	HMI 71125-01	80-mm Filter Media, 5-pack	Boron
ATU 96200	Sample Pump Tubing, 900	900	HTF 71140-01	Boron Inline 15 micron Filter	Boron
HTF 34000	Disc Filter	M-Series/900	HTF 71141-01	Boron 15 micron SS Inline Filter Media	Boron
APK 96004-01	Resin Bed, 900	900			
ARK 34110	Pump Diaphragm Maintenance Kit	M-Series/900 InnovOx			



What to Expect from Sievers Standards and Consumables

- Premium performance and accuracy
- Certified, traceable, and guaranteed
- Convenient and available whenever you need them (next day delivery for most shipments)
- Savings in time, effort, operating budget, and avoidance of costly failures with these ready-to-use products

How To Order

The Americas

Tel: +1 800 255 6964 or +1 303 444 2009

Fax: +1 303-527 1797

Email: Send purchase orders to: orders@geinstruments.com

Web Store: <http://www.geinstruments.com/store>

Send general inquiries to: www.geinstruments.com/info

Office Hours: Monday through Friday, 10:00 am - 7:00 pm (EST)

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We accept Visa, MasterCard, and American Express.

Rapid Shipping

Same day shipping is available for most products in North America and Europe.

GE Analytical Instruments can deliver your product throughout the world from one of our standards and consumables manufacturing facilities in the US, UK, China, and India.