



Life Sciences

Certified Reference Materials

2015-2016



Waters

THE SCIENCE OF WHAT'S POSSIBLE.®



Michael J. Yelle, Vice President, Consumables Business Unit

With over 50 years of market leadership, Waters® is committed to the development, production, and manufacture of the highest quality consumable products to solve our customers' most difficult challenges and enable your success. We are driven by our core mission: to develop enabling technologies that are the industry standard for performance, reproducibility, and quality.

ERA has been producing Certified Reference Materials (CRMs) for the Life Sciences industry since 2000 in the United States and since 2006 in the United Kingdom. Both manufacturing facilities maintain ISO Guide 34:2008 accreditations to ensure that you receive the highest quality products in accordance with globally recognized requirements for Certified Reference Materials. ERA also maintains other accreditations such as ISO 9001:2008; ISO Guide 17025:2005; and ISO Guide 17043. Very few manufacturers can match the same rigorous ISO quality programs that ERA has in place. ERA receives the independent oversight necessary to consistently produce the best products available to meet or exceed your laboratory's quality objectives.

To learn more about how ERA can help achieve your objectives for quality, variety, and reliability, visit www.eraqc.com.

Regards,

A handwritten signature in black ink that reads "Mike Yelle". The signature is stylized and cursive.

Mike Yelle

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ABOUT ERA

ERA introduced its Life Science product line in 2000. Since that time, ERA has grown to become the premier manufacturer of Certified Reference Materials (CRMs) for TOC, and conductivity for ultra-pure water analysis including pharmaceutical water. We offer a comprehensive line of reference standards, reagents and sampling containers for ultra-pure water analysis in the pharmaceutical, biotechnology, medical device, semiconductor and other industry sectors.



Regardless of manufacturer, ERA is your source for independent standards that are designed specifically for the TOC instruments in your facility:

- ANATEL®
- Sievers®
- Analytik Jena
- OI Analytical®
- Shimadzu®
- Teledyne Tekmar®
- Thornton®
- Comet
- Swan
- Lighthouse
- MembraPure



Teledyne Tekmar Fusion



Sievers® Model 900

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ERA'S ACCREDITATIONS

ERA customers recognize that the products and services we provide are among the very best in the world. Our certifications and accreditations are just one facet of what distinguishes ERA as an elite manufacturer of Certified Reference Materials (CRMs) for analytical laboratories globally. Few manufacturers can boast the same rigorous ISO quality programs ERA has in place.

ERA achieves registration or accreditation when an outside authority that has been qualified to review our processes and procedures evaluates us against an internationally developed set of strict requirements. These requirements span from making certain ERA maintains the proper physical facilities to evaluating the calculations used in our statistical analysis. The accreditations affirm our ability to provide customers with the highest quality products possible and allow for international acceptance of ERA products by laboratory accreditation bodies.

Our two facilities in the U.S. and UK are registered to ISO 9001:2008 and accredited to ISO Guide 34 and ISO 17025.

...an outside authority that has been qualified to review our processes and procedures evaluates us against an internationally developed set of strict requirements.

ISO 9001

ISO 9001 is a quality management standard that applies to all types of organizations regardless of size or function. This international standard helps both product and service oriented organizations achieve standards of quality that are recognized and respected throughout the world. This is accomplished mostly through quality management practices that extend into all areas of an organization.

ISO 9001 registered companies must have written procedures and training documentation in the areas of customer service, complaint handling, product design, purchasing, manufacturing, product evaluation, packaging and shipping. While it is not a requirement, included on our ISO 9001:2008 accreditation scope are Synthetic Reference Materials and Quality Control Standards.

While many companies view their ISO 9001 registration as the pinnacle of success in their pursuit of quality, it represents only the foundation for ERA.

ERA is certified by NQA in the United States and by LRQA in the United Kingdom.



ISO GUIDE 34

Our ISO Guide 34:2008 accreditation is targeted specifically to Certified Reference Material (CRM) manufacturers. For a manufacturer to become ISO Guide 34 registered, the policies and processes employed to design, manufacture and certify reference materials must be validated and proven to be accurate and robust. For CRMs, ISO Guide 34 also requires that each Certificate of Analysis (CofA)

For a manufacturer to become ISO Guide 34 registered, the policies and processes employed to design, manufacture and certify reference materials must be validated and proven to be accurate and robust.

include an uncertainty statement that reflects all sources of error involved in certifying the standard, including measurements and material purity; it must allow for complete traceability of the CRM. The ability to maintain an unbroken chain of calibrations, and also to control, calculate and report uncertainty correctly are what differentiates ERA's expertise from that of our competitors.

ISO/IEC GUIDE 34:2009



No. 4604

ISO 17025

ISO 17025:2005 certification, covering the competence of testing and calibration laboratories, ensures that a company's laboratory tests are performed correctly, and that attestations of product quality are appropriate and defensible. All aspects of raw material, in-process and final product verification are covered by this accreditation. It certifies the company's ability to demonstrate the robustness of their quality program through comprehensive and accurate product testing.

ISO/IEC 17025:2005



No. 4604

ISO GUIDE 17043

ISO Guide 17043 is designed specifically for Proficiency Testing (inter-laboratory comparison testing) providers. ISO 17043 specifies the essential activities that need to be evaluated when conducting inter-laboratory testing comparisons. ISO 17043 defines the criteria related to study design, sample manufacture and the ensuring of homogeneity and stability, which must be taken into account in the design and execution of proficiency testing schemes.

ISO/IEC 17043:2010



ERA's U.S. facility is accredited to ISO Guide 34, ISO 17025 and ISO 17043 by American Association of Laboratory Accreditation (A2LA) and registered to ISO 9001:2008 by National Quality Assurance (NQA).
ERA's UK facility is accredited to ISO Guide 34 and ISO 17025 by United Kingdom Accreditation Society (UKAS) and registered to ISO 9001:2008 by Lloyd's Register Quality Assurance (LRQA).

ANATEL USP<643> Global ISO 17025 Ultraviolet 1,4-benzoquinone
 ANATEL TOC PAT700 Certainty
 C₈H₅KO₄ KHP TOC C of A System Suitability NIST Certified Reference Material
 NaHCO₃ Sucrose ISO Guide 34
 C₁₂H₂₂O₁₁ EP 2.2.44 Rss Validation A643 Combustion R_s USP Carbon
 A1000 CRM_s Certified Persulfate Total Organic Carbon Traceable Accuracy
 Response Efficiency

ANATEL TOC

ANATEL-brand Total Organic Carbon analyzers continue in popularity for ultrapure water monitoring applications. Combine your ANATEL technology with the finest reference standards available from ERA – ISO Guide 34 accredited to support the quality needs of our FDA-regulated customers.

ANATEL

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ANATEL PAT700

All of our ANATEL Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. CRMs for the ANATEL PAT700 are formulated specifically for the unique technology inherent in that instrument and are packaged in ready-to-use RFID tagged bottles.

System Suitability

Sets – USP / EP	Cat. #	Availability
USP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 60 mL bottles. <i>Replaces ANATEL FG7018402</i>	18402	Ships in 1 business day
Sets – JP	Cat. #	Availability
JP System Suitability Set Includes (1) Reagent Water Rw, and (1) 0.50 mg/L C Sodium Dodecylbenzene Sulfonate (SDBS) Rss in 60 mL bottles.	18402J	Ships in 5 business days
Sets – Low-Level System Suitability	Cat. #	Availability
Low-Level System Suitability Set Includes (1) Reagent Water, (1) 0.30 mg/L C USP Sucrose, and (1) 0.30 mg/L C USP 1,4-Benzoquinone in 60 mL bottles.	18408	Ships in 5 business days

Calibration

Kits	Cat. #	Availability
Calibration Standards Kit Includes (1) Blank, (1) 0.25 mg/L C NIST Sucrose, (1) 0.50 mg/L C NIST Sucrose, and (1) 0.75 mg/L C NIST Sucrose in 60 mL bottles. <i>Replaces ANATEL FG7019202</i>	19202	Ships in 1 business day
Kits – JP	Cat. #	Availability
JP Calibration Standards Kit #2 Includes (1) Calibration Blank, (1) 0.50 mg/L C from NIST KHP, (1) 0.75 mg/L C from NIST KHP, (1) 1.25 mg/L C from NIST KHP in 60 mL bottles.	19203J	Ships in 5 business days

Conductivity

Kits	Cat. #	Availability
Conductivity Solution Kit Includes (1) 100 uS/cm Potassium Chloride (KCl) Solution in a 60 mL bottle. <i>Replaces ANATEL FG7002602</i>	02602	Ships in 1 business day

Validation

Kits	Cat. #	Availability
Validation Control Kit Includes (1) Blank, and (1) 0.50 mg/L C NIST Sucrose in 60 mL bottles. <i>Replaces ANATEL FG7019222</i>	19222	Ships in 1 business day
JP Validation Control Kit #2 Includes (1) Blank, and (1) 0.75 mg/L C NIST KHP in 60 mL bottles.	19223J	Ships in 5 business days
Validation Protocol Reagent Kit Includes (14) Blanks, (5) Conductivity Solutions, (1) Validation Control Kit, (2) Calibration Standards Kit, (1) System Suitability Set, (1) Excursion with Validation Kit, (1) 0.25 mg/L C NIST Sucrose, (1) 0.75 mg/L C NIST Sucrose, (1) USP Reagent Water Rw, (1) 0.50mg/L C USP 1,4-Benzoquinone, and (2) Excursion Bottles (all bottles are 60 mL). <u>Does not include NIST Traceable Resistor.</u> <i>Replaces ANATEL FG7019232</i>	19232	Ships in 5 business days

Consumables

	Cat. #	Availability
Replacement UV Lamp	20037	Ships in 1 business day
60 mL Low TOC HDPE Bottle – Natural (25/pack)	25031	Ships in 1 business day
Pre-Cleaned Caps w/Septa (100/pack)	25011	Ships in 5 business days

Individual Set/Kit components and/or bulk sizes may be available for the TOC and Conductivity standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

ERA is making the most commonly requested products available within 24 hours of order receipt to consistently meet your product needs. Products that are less frequently requested will be shipped within 5 business days of order receipt. Please check your order confirmation for the specific ship date.



Anatel PAT700

All of our ANATEL Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. These manufacturing processes ensure that the results you receive from your TOC instrument reflect its true capabilities.

The following CRMs are used for calibration and validation of the ANATEL A643 on-line TOC analyzer.

System Suitability

Sets – USP / EP	Cat. #	Availability
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USP Bulk Water System Suitability Set

Includes (2) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 60 mL bottles.

Replaces ANATEL FG5017601

18400

Ships in 1 business day

Sets – Low-Level System Suitability

Low-Level System Suitability Set

Includes (2) Reagent Water, (1) 0.30 mg/L C USP Sucrose, and (1) 0.30 mg/L C USP 1,4-Benzoquinone in 60 mL bottles.

18066

Ships in 5 business days

Calibration

Kits	Cat. #	Availability
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Calibration Standards Kit

Includes (2) Blanks, (1) 0.25 mg/L C NIST Sucrose, (1) 0.50 mg/L C NIST Sucrose, and (1) 0.75 mg/L C NIST Sucrose in 60 mL bottles.

Replaces ANATEL FG7017401

19200

Ships in 1 business day

Conductivity

Kits	Cat. #	Availability
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Conductivity Solution Kit

Includes (1) 100 uS/cm Potassium Chloride (KCl) Solution in a 60 mL bottle.

Replaces ANATEL FG5010401

02610

Ships in 1 business day



Anatel Access A643a

Validation

Kits	Cat. #	Availability
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Validation Control Kit

Includes (2) Blanks, and (1) 0.50 mg/L C NIST Sucrose in 60 mL bottles.

Replaces ANATEL FG5017501

19220

Ships in 1 business day

Validation Protocol Reagent Kit

Includes (10) Blanks, (3) 0.25 mg/L C NIST Sucrose, (5) 0.50 mg/L C NIST Sucrose, (3) 0.75 mg/L C NIST Sucrose, (1) 100 uS/cm Conductivity Solution Kit, and (4) USP System Suitability Sets (all bottles are 60 mL).

Replaces reference materials portion of ANATEL FG5017701. Lamp not included.

19230

Ships in 5 business days

Validation Kit

Includes (2) Blanks, and (1) 0.25 mg/L C NIST Sucrose, (1) 0.50 mg/L C NIST Sucrose, (1) 0.750 mg/L C NIST Sucrose, (1) 100 uS/cm Conductivity Solution Kit, and (1) USP System Suitability Set in 60 mL bottles.

19210

Ships in 5 business days

Consumables

	Cat. #	Availability
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Replacement UV Lamp

Replaces ANATEL FG6002601

20036A

Ships in 1 business day

60 mL Low TOC HDPE Bottle – Natural (25/pack)

25031

Ships in 1 business day

Pre-Cleaned Caps w/Septa (100/pack)

25011

Ships in 5 business days

Low TOC Sample Vial Kit

68 pre-cleaned 50 mL Low TOC vials with pre-cleaned septa and aluminum crimp cap. Use for grab samples to be analyzed on Anatel A643.

Replaces ANATEL FG5014801

25045

Ships in 1 business day

Individual Set/Kit components and/or bulk sizes may be available for the TOC and Conductivity standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

ERA is making the most commonly requested products available within 24 hours of order receipt to consistently meet your product needs. Products that are less frequently requested will be shipped within 5 business days of order receipt. Please check your order confirmation for the specific ship date.

ANATEL TOC600

The following CRMs are used for calibration and validation of the ANATEL TOC600 TOC analyzer.

System Suitability

Sets – USP / EP	Cat. #	Availability
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USP/EP Bulk Water System Suitability Set

Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 125 mL bottles.

Replaces ANATEL FG5018036

18036

Ships in 1 business day

Calibration

Kits	Cat. #	Availability
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Calibration Standards Kit

Includes (1) Blank, (1) 0.25 mg/L C NIST Sucrose, (1) 0.50 mg/L C NIST Sucrose, and (1) 0.75 mg/L C NIST Sucrose in 125 mL bottles.

Replaces ANATEL FG5019201

19201

Ships in 1 business day

Conductivity

Kits	Cat. #	Availability
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Conductivity Solution Kit

Includes (1) 100 uS/cm Potassium Chloride (KCl) Solution in a 125 mL bottle.

Replaces ANATEL FG5002601

02601

Ships in 1 business day

Validation

Kits	Cat. #	Availability
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Validation Control Kit

Includes (1) Blank, and (1) 0.50 mg/L C NIST Sucrose in 125 mL bottles.

Replaces ANATEL FG5019221

19221

Ships in 1 business day

Validation Protocol Reagent Kit

Includes (3) TOC600 Calibration Kits, (1) TOC600 100 uS/cm Conductivity Solution Kit, (3) TOC600 Validation Control Kits, and (4) TOC600 USP System Suitability Sets (all bottles are 125 mL).

Replaces ANATEL FG5019231

19231

Ships in 5 business days

Consumables

	Cat. #	Availability
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Replacement UV Lamp

Replaces ANATEL FG6002601

20036A

Ships in 1 business day

ANATEL A-1000

The following CRMs are used for calibration and validation of the ANATEL A-1000 TOC analyzer.

System Suitability

Sets – USP / EP	Cat. #	Availability
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USP/EP Bulk Water System Suitability Set

Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 1000 mL HDPE bottles.

19030

Ships in 5 business days

Calibration Set

Individual [all standards sold in 1000 mL HDPE Bottles]	Cat. #	Availability
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Calibration Blank

10211

Ships in 5 business days

0.25 mg/L C NIST Sucrose

10511

Ships in 5 business days

0.50 mg/L C NIST Sucrose

10811

Ships in 5 business days

0.75 mg/L C NIST Sucrose

11111

Ships in 5 business days

Individual Set/Kit components and/or bulk sizes may be available for the TOC and Conductivity standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

ERA is making the most commonly requested products available within 24 hours of order receipt to consistently meet your product needs. Products that are less frequently requested will be shipped within 5 business days of order receipt. Please check your order confirmation for the specific ship date.



SIEVERS

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SIEVERS 900 & M9 SERIES

All of our Sievers' Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. The following CRMs are designed to use on Sievers 900 and Sievers M9 Series TOC instruments for calibration, validation, and to satisfy regulatory requirements.

System Suitability		
Sets – USP / EP	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 40 mL vials. <i>Replaces Sievers CSTD 31004-01</i>	18000	Ships in 1 business day
Sets – USP	Cat. #	Availability
USP Sterile Water System Suitability Set Includes (1) Reagent Water Rw, (1) 8.0 mg/L C USP Sucrose, and (1) 8.0 mg/L USP 1,4-Benzoquinone in 40 mL vials.	18061	Ships in 5 business days
Sets – JP	Cat. #	Availability
JP System Suitability Set Includes (1) Reagent Water Rw, (1) 0.50 mg/L C from Sodium Dodecylbenzene Sulfonate Rss in 40 mL vials. <i>Replaces Sievers CSTD 90039-01</i>	18000J	Ships in 5 business days
Sets – Low-Level System Suitability	Cat. #	Availability
Low-Level System Suitability Set Includes (1) Reagent Water, (1) 0.30 mg/L C USP Sucrose, and (1) 0.30 mg/L C USP 1,4-Benzoquinone in 40 mL vials.	18040	Ships in 5 business days

Consumables		
	Cat. #	Availability
Replacement UV Lamp	20045	Ships in 1 business day
Replacement Pump Tubing	20060	Ships in 1 business day
Phosphoric Acid Reagent Cartridge –150 mL*	21010	Ships in 5 business days
Phosphoric Acid Reagent Cartridge –300 mL*	21001	Ships in 5 business days
Persulfate Oxidizer Reagent Cartridge – 150 mL*	21015	Ships in 5 business days
Persulfate Oxidizer Reagent Cartridge – 300 mL*	21006	Ships in 5 business days
40 mL Ultra-Low TOC Vials	25025	Ships in 1 business day
60 Micron In-Line Stainless Filter	25035	Ships in 5 business days

*Dangerous goods.

Calibration & Validation		
Kits	Cat. #	Availability
Robustness Verification Set Includes (1) Reagent Water Rw, (1) 0.50 mg/L C from USP Sucrose Rs and (1) 0.50 mg/L C from USP 1,4-Benzoquinone Rss preserved with acid in (3) vials.	18000R	Ships in 5 business days
Linearity Set Includes (1) Blank, (1) 0.25 mg/L C NIST Sucrose, (1) 0.50 mg/L C NIST Sucrose and (1) 0.75 mg/L C NIST Sucrose in 40 mL vials. <i>Replaces CSTD 31012-01</i>	19515	Ships in 5 business days
Calibration & Verification Set Includes (2) Blanks, (2) 1.0 mg/L IC NIST NaHCO ₃ , (1) 1.0 mg/L C NIST KHP, and (1) 1.0 mg/L C NIST Sucrose in 40 mL vials. <i>Replaces CSTD 90016-01</i>	19600	Ships in 5 business days
Multi-Point Calibration Set Includes (1) Blank, (1) each of 1.0, 5.0, 10.0, 25.0 and 50.0 mg/L C NIST KHP, (1) each of 1.0, 5.0, 10.0, 25.0 and 50.0 mg/L IC NIST NaHCO ₃ in 40 mL vials. <i>Replaces CSTD 90000-01</i>	19610	Ships in 5 business days
Autoreagents Calibration Set Includes (1) Blank, (1) 25.0 mg/L C NIST KHP, (1) 1.0 mg/L IC NIST NaHCO ₃ , and (1) 50.0 mg/L C from Nicotinamide in 40 mL vials. <i>Replaces CSTD 90036-01</i>	19611	Ships in 5 business days
Autoreagents Calibration & Verification Set Includes (2) Blanks, (1) 25.0 mg/L C NIST KHP, (1) 1.0 mg/L IC NIST NaHCO ₃ , and (1) 50.0 mg/L C from Nicotinamide, (1) 25.0 mg/L C NIST Sucrose, (1) 50.0 mg/L C NIST Sucrose and (1) 50 mg/L IC NaHCO ₃ in 40 mL vials. <i>Replaces CSTD 90028-01</i>	19616	Ships in 5 business days
Specificity Verification Set Includes (1) Blank, (1) 0.50 mg/L C from Methanol, (1) 0.50 mg/L C from Nicotinamide and (1) 0.50 mg/L C from KHP in 40 mL vials.	19615	Ships in 5 business days
Validation Set with Calibration & Verification Includes (28) 40 mL vials, (2) Blank, (2) 1.0 mg/L C NIST KHP, (2) 1.0 mg/L IC NaHCO ₃ ; (1) Blank, (1) 0.50 mg/L C NIST Sucrose, (1) 0.50 mg/L IC NaHCO ₃ ; (2) Reagent Water Rw, (2) 0.50 mg/L C from USP Sucrose Rs and (2) 0.50 mg/L C from USP 1,4-Benzoquinone Rss; (1) Blank, (1) 0.25 mg/L C NIST Sucrose, (1) 0.50 mg/L C NIST Sucrose, (1) 0.75 mg/L C NIST Sucrose; (1) Reagent Water Rw, (1) 0.50 mg/L C from USP Sucrose Rs; (1) Blank; (1) 0.50 mg/L C from Methanol; (1) 0.50 mg/L C from Nicotinamide; (1) 0.50 mg/L C from NIST KHP; (1) Reagent Water Rw; (1) 0.50 mg/L C from USP Sucrose Rs; and (1) 0.50 mg/L C from USP 1,4-Benzoquinone Rss. <i>Replaces Sievers CSTD90025</i>	19617	Ships in 5 business days
Calibration Kit Includes (1) Blank, (1) 1.0 mg/L IC NIST NaHCO ₃ , (1) 1.0 mg/L C NIST KHP in 40 mL vials. <i>Replaces CSTD 90001-01</i>	19620	Ships in 5 business days

Individual Set/Kit components and/or bulk sizes may be available for the TOC and Conductivity standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

ERA is making the most commonly requested products available within 24 hours of order receipt to consistently meet your product needs. Products that are less frequently requested will be shipped within 5 business days of order receipt. Please check your order confirmation for the specific ship date.

All of our Sievers' Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation.

The following CRMs are designed to use on Sievers 500 RL TOC instrument for calibration, validation, and to satisfy regulatory requirements.

System Suitability		
Sets – USP / EP	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 40 mL vials. <i>Replaces Sievers CSTD 74403</i>	15105	Ships in 1 business day
Sets – USP	Cat. #	Availability
USP Sterile Water System Suitability Set Includes (1) Reagent Water Rw, (1) 8.0 mg/L C USP Sucrose, and (1) 8.0 mg/L USP 1,4-Benzoquinone in 40 mL vials.	18061	Ships in 5 business days
Sets – JP	Cat. #	Availability
JP System Suitability Set Includes (1) Reagent Water Rw, (1) 0.50 mg/L C from Sodium Dodecylbenzene Sulfonate Rss in 40 mL vials. <i>Replaces Sievers CSTD 90039-01</i>	18000J	Ships in 5 business days
Sets – Low-Level System Suitability	Cat. #	Availability
Low-Level System Suitability Set Includes (1) Reagent Water, (1) 0.30 mg/L C USP Sucrose, and (1) 0.30 mg/L C USP 1,4-Benzoquinone in 40 mL vials.	18040	Ships in 5 business days

Consumables		
	Cat. #	Availability
Replacement UV Lamp	20045	Ships in 1 business day
40 mL Ultra-Low TOC vials	25025	Ships in 1 business day
60 Micron In-Line Stainless Filter	25035	Ships in 5 business days

Calibration & Validation RL (Standard IOS) Single-Use CRMs		
Kits	Cat. #	Availability
Single-Point Calibration Set Includes (2) Blanks, (1) 1.5 mg/L C NIST KHP in 40 mL glass vials and (1) 25.0 uS/cm Conductivity standard in 30 mL HDPE vial. <i>Replaces CSTD 74401</i>	15100	Ships in 5 business days
Single-Point Calibration / Verification Kit Includes (2) Blanks, (1) 1.5 mg/L C NIST KHP in 40 mL glass vials, (1) 25.0 uS/cm Conductivity standard in 30 mL HDPE vial, (1) Verification Blank, (1) 0.50 mg/L C NIST Sucrose in 40 mL glass vials, and (1) 25.0 uS/cm Conductivity standard in 30 mL HDPE vial. <i>Replaces CSTD 74612</i>	15101	Ships in 5 business days
Accuracy / Precision / Verification Set Includes (1) Verification Blank, (1) 0.5 mg/L C NIST Sucrose in 40 mL glass vials and (1) 25.0 uS/cm Conductivity standard in 30 mL HDPE vial. <i>Replaces CSTD 74402</i>	15104	Ships in 5 business days
Linearity Set Includes (1) Linearity Blank, (1) each 0.25 mg/L, 0.50 mg/L, and 0.75 mg/L C NIST KHP in 40 mL glass vials. <i>Replaces CSTD 74406</i>	15106	Ships in 5 business days
Single-Point Calibration Set – TOC Only Includes (2) Calibration Blanks and (1) 1.5 mg/L C NIST KHP in 40 mL glass vials. <i>Replaces CSTD 74405</i>	15109	Ships in 5 business days
Accuracy / Precision / Verification Set – TOC Only Includes (1) Verification Blank and (1) 0.5 mg/L C NIST Sucrose in 40 mL glass vials. Conductivity standard is not included in this set. <i>Replaces CSTD 74407</i>	15110	Ships in 5 business days
Single-Point Calibration / Verification Set – TOC Only Includes (2) Blanks, (1) 1.5 mg/L C NIST KHP, (1) Verification Blank, (1) 0.50 mg/L C NIST Sucrose in 40 mL glass vials. Conductivity standards are not included in this set. <i>Replaces CSTD 74622</i>	15111	Ships in 5 business days

Individual Set/Kit components and/or bulk sizes may be available for the TOC and Conductivity standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

ERA is making the most commonly requested products available within 24 hours of order receipt to consistently meet your product needs. Products that are less frequently requested will be shipped within 5 business days of order receipt. Please check your order confirmation for the specific ship date.

SIEVERS 800

All of our Sievers' Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. The following CRMs are designed to use on Sievers 800 TOC instrument for calibration, validation, and to satisfy regulatory requirements.

System Suitability		
Sets – USP / EP	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 40 mL vials. <i>Replaces Sievers CSTD 31004-01</i>	18000	Ships in 1 business day
Sets – USP	Cat. #	Availability
USP Sterile Water System Suitability Set Includes (1) Reagent Water Rw, (1) 8.0 mg/L C USP Sucrose, and (1) 8.0 mg/L USP 1,4-Benzoquinone in 40 mL vials.	18061	Ships in 5 business days
Sets – JP	Cat. #	Availability
JP System Suitability Set Includes (1) Reagent Water Rw, (1) 0.50 mg/L C from Sodium Dodecylbenzenesulfonate Rss in 40 mL vials. <i>Replaces Sievers CSTD 90039-01</i>	18000J	Ships in 5 business days
Sets – Low-Level System Suitability	Cat. #	Availability
Low-Level System Suitability Set Includes (1) Reagent Water, (1) 0.30 mg/L C USP Sucrose, and (1) 0.30 mg/L C USP 1,4-Benzoquinone in 40 mL vials.	18040	Ships in 5 business days

Calibration & Validation		
Kits	Cat. #	Availability
Autosampler Calibration Set Includes (4) Blanks, (4) 25.0 mg/L C NIST KHP, and (4) 25.0 mg/L IC NIST NaHCO ₃ in 40 mL vials. <i>Replaces CSTD 31002-01</i>	19500	Ships in 5 business days
Grab Mode Calibration Set Includes (2) Blanks, (2) 25.0 mg/L C NIST KHP, and (2) 25.0 mg/L IC NIST NaHCO ₃ in 40 mL vials. <i>Replaces CSTD 31001-01</i>	19510	Ships in 5 business days
Linearity Set Includes (1) Blank, (1) 0.25 mg/L C NIST KHP, (1) 0.50 mg/L C NIST KHP and (1) 0.75 mg/L C NIST KHP in 40 mL vials. <i>Replaces CSTD 31012-01</i>	19515	Ships in 5 business days

Consumables		
	Cat. #	Availability
Replacement UV Lamp	20040	Ships in 1 business day
Replacement Pump Tubing	20050	Ships in 1 business day
Phosphoric Acid Reagent Cartridge – 150 mL*	21000	Ships in 5 business days
Phosphoric Acid Reagent Cartridge – 300 mL*	21001	Ships in 5 business days
Persulfate Oxidizer Reagent Cartridge – 150 mL*	21005	Ships in 5 business days
Persulfate Oxidizer Reagent Cartridge – 300 mL*	21006	Ships in 5 business days
40 mL Ultra-Low TOC Vials	25025	Ships in 1 business day
60 Micron In-Line Stainless Filter	25035	Ships in 5 business days
Fan Filter	25040	Ships in 5 business days

*Dangerous goods.

Individual Set/Kit components and/or bulk sizes may be available for the TOC and Conductivity standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

ERA is making the most commonly requested products available within 24 hours of order receipt to consistently meet your product needs. Products that are less frequently requested will be shipped within 5 business days of order receipt. Please check your order confirmation for the specific ship date.

All of our Sievers' Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. The following CRMs are designed to use on Sievers 400 TOC instrument for calibration, validation, and to satisfy regulatory requirements.



Sievers 400 ES

System Suitability

Sets – USP / EP	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 30 mL vials. <i>Replaces Sievers CSTD 31025-03</i>	18300	Ships in 1 business day

Calibration

Kits	Cat. #	Availability
Calibration Kit Includes (1) Calibration Blank, (1) 1.25 mg/L C NIST KHP, and (1) 25.0 uS/cm Conductivity standard in 30 mL vials. <i>Replaces CSTD 31005-02</i>	14101	Ships in 1 business day
Single Use (in 30 mL vials)	Cat. #	Availability
Calibration Blank	13700	Ships in 1 business day
1.25 mg/L C NIST Sucrose	14100	Ships in 1 business day

Conductivity

Single Use (in 30 mL vial)	Cat. #	Availability
Conductivity Standard Includes (1) 25 uS/cm solution in 30 mL vial. <i>Replaces Sievers CSTD 30030-01</i>	02700	Ships in 1 business day

Consumables

	Cat. #	Availability
Replacement UV Lamp	20040	Ships in 1 business day
Replacement Pump Tubing	20055	Ships in 1 business day
60 Micron In-Line Stainless Filter	25035	Ships in 5 business days
Fan Filter	25040	Ships in 5 business days

Individual Set/Kit components and/or bulk sizes may be available for the TOC and Conductivity standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

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Certified Total Organic Carbon $C_8H_5KO_4$ CRM's System Suitability ISO Guide 34
 ANALYTIK JENA TOC
 EP 2.2.44 Rss Ultraviolet N/CUV HS Validation Carbon N/C-Pharma HS Global Persulfate TOC
 Certified Reference Material Accuracy $C_{12}H_{22}O_{11}$ C of A USP Certainty USP <643> Traceable
 1,4-benzoquinone Response Efficiency

ANALYTIK jENA

ERA carries all the major validation and calibration sets for Analytik Jena (AJ) TOC analyzers.

All of ERA's Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. The following CRMs are designed to use on Analytik Jena TOC instruments for calibration, validation, and to satisfy regulatory requirements.

System Suitability

Sets – USP / EP	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 40 mL vials. <i>For use with AJ multi N/C pharma HS and IL550</i>	18000	Ships in 1 business day
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 40 mL vials. <i>For use with AJ multi N/C UVHS and IL500</i>	18004	Ships in 1 business day
Sets – USP	Cat. #	Availability
USP Sterile Water System Suitability Set Includes (1) Reagent Water Rw, (1) 8.0 mg/L C USP Sucrose, and (1) 8.0 mg/L USP 1,4-Benzoquinone in 40 mL vials.	18061	Ships in 5 business days
Sets – JP	Cat. #	Availability
JP System Suitability Set Includes (1) Reagent Water Rw, (1) 0.50 mg/L C from Sodium Dodecylbenzenesulfonate Rss in 40 mL vials.	18000J	Ships in 5 business days
Sets – Low-Level System Suitability	Cat. #	Availability
Low-Level System Suitability Set Includes (1) Reagent Water, (1) 0.30 mg/L C USP Sucrose, and (1) 0.30 mg/L C USP 1,4-Benzoquinone in 40 mL vials.	18040	Ships in 5 business days

Calibration & Cleaning Validation

Kits	Cat. #	Availability
Cleaning Validation Kit Includes (1) Calibration Blank, (1) each 0.25 mg/L, 0.50 mg/L, 0.75 mg/L, and 1.0 mg/L C NIST Sucrose in 40 mL vials.	19901	Ships in 5 business days
Full TOC Calibration Kit Includes (1) Calibration Blank, (1) each 1.0 mg/L, 2.50 mg/L, 5.0 mg/L, 10.0 mg/L, 25.0 mg/L, 50.0mg/L, and 100 mg/L C NIST KHP in 250 mL amber glass bottles.	19970	Ships in 5 business days
Limited TOC Calibration Kit Includes (1) Calibration Blank and (1) 0.6 mg/L C USP Sucrose in 250 mL amber glass bottles.	19985	Ships in 5 business days

Individual Set/Kit components and/or bulk sizes may be available for the TOC standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

ERA is making the most commonly requested products available within 24 hours of order receipt to consistently meet your product needs. Products that are less frequently requested will be shipped within 5 business days of order receipt. Please check your order confirmation for the specific ship date.



Analytik Jena multi N/C pharma HS

Aurora Certified USP <643> OI 1010 Accuracy System Suitability Persulfate Response Efficiency ISO Guide 34 C₁₂H₂₂O₁₁
 Total Organic Carbon NaHCO₃ CRMS
 OI ANALYTICAL TOC
 1,4-benzoquinone C₆H₄O₂ Traceable Validation Certainty Ultraviolet ISO 17025 Accredited USP NIST Carbon EP 2.2.44 C of A
 Certified Reference Material

OI ANALYTICAL

The ERA Certified Reference Materials (CRMs) listed below are commonly purchased for use with OI Analytical TOC instruments, including the very popular Aurora® model.

All of ERA's Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. The following CRMs are designed to use on OI Analytical TOC instruments for calibration, validation, and to satisfy regulatory requirements.

System Suitability

Sets – USP / EP	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water R _w , (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 40 mL vials.	18004	Ships in 1 business day
Sets – USP	Cat. #	Availability
USP Sterile Water System Suitability Set Includes (1) Reagent Water R _w , (1) 8.0 mg/L C USP Sucrose, and (1) 8.0 mg/L USP 1,4-Benzoquinone in 40 mL vials.	18061	Ships in 5 business days
Sets – JP	Cat. #	Availability
JP System Suitability Set Includes (1) Reagent Water R _w , (1) 0.50 mg/L C from Sodium Dodecylbenzenesulfonate R _{ss} in 40 mL vials.	18000J	Ships in 5 business days
Sets – Low-Level System Suitability	Cat. #	Availability
Low-Level System Suitability Set Includes (1) Reagent Water, (1) 0.30 mg/L C USP Sucrose, and (1) 0.30 mg/L C USP 1,4-Benzoquinone in 40 mL vials.	18040	Ships in 5 business days

Calibration & Validation

Kits	Cat. #	Availability
Ultra Low-Level CRMs Kit Includes (3) Calibration Blanks (1) each 0.050 mg/L, 0.060 mg/L, 0.070 mg/L, 0.080 mg/L, 0.090 mg/L, 0.10 mg/L, 0.25 mg/L, 0.50 mg/L, and 1.0 mg/L C NIST KHP in 40 mL vials.	14203	Ships in 5 business days
Validation Set – Aurora Includes (6) Water Blanks, (1) 0.50 mg/L C NIST KHP, (3) 1.0 mg/L C NIST KHP, (1) 5.0 mg/L C NIST KHP, (1) 10.0 mg/L C NIST KHP, (1) 25.0 mg/L C NIST KHP, (1) 5.0 mg/L C NIST KHP/50.0 mg/L IC NIST NaHCO ₃ , (4) 0.50 mg/L C USP Sucrose, and (1) 0.50 mg/L C USP 1,4-Benzoquinone in 40 mL vials.	19007	Ships in 5 business days

Consumables

Kits	Cat. #	Availability
Phosphoric Acid Reagent (1 Liter)*	21016	Ships in 5 business days
Phosphoric Acid Reagent (2 Liter)*	21018	Ships in 5 business days
Persulfate Oxidizer Reagent (1 Liter)*	21017	Ships in 5 business days
Persulfate Oxidizer Reagent (2 Liter)*	21019	Ships in 5 business days

*Dangerous goods.

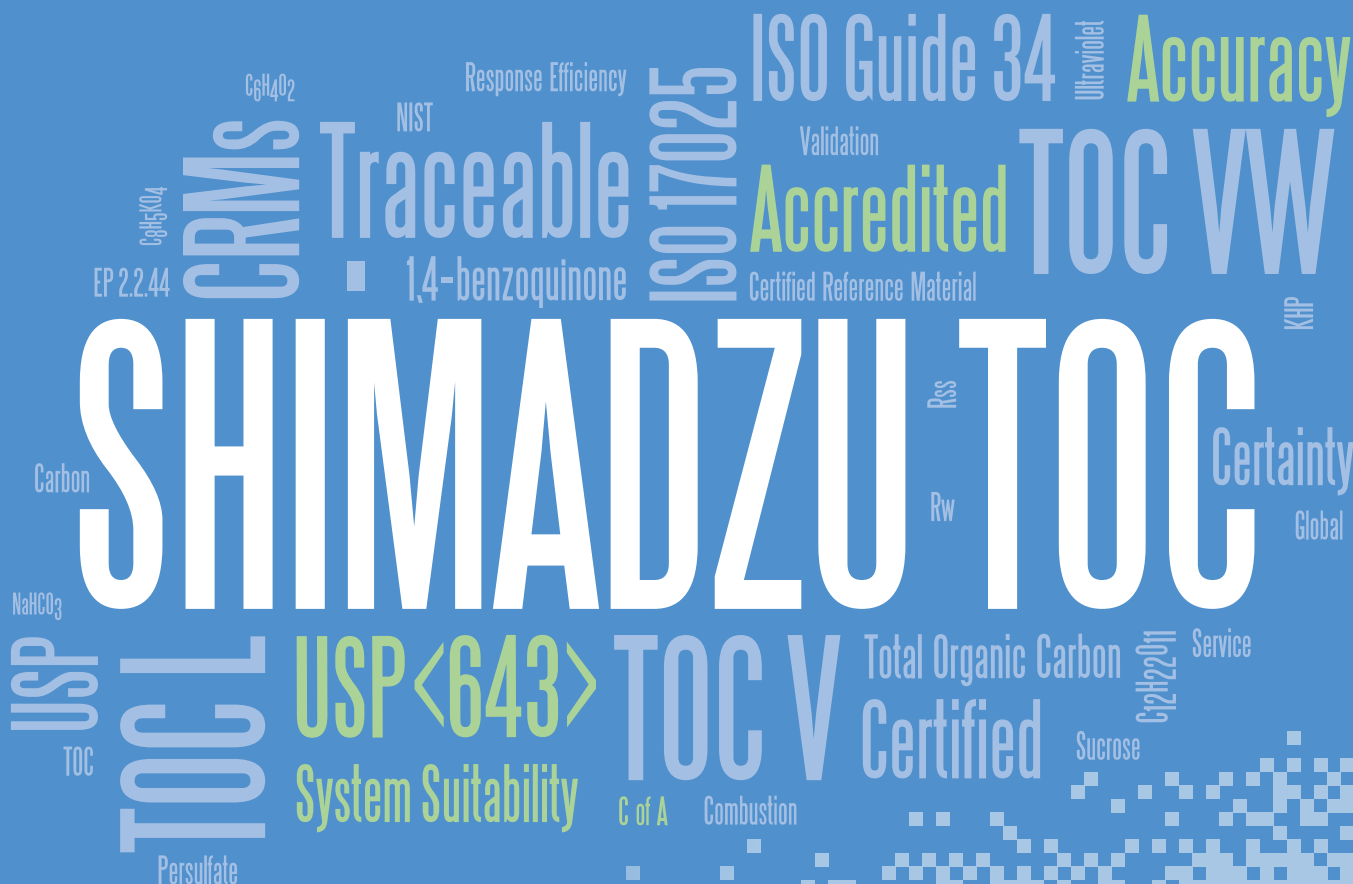
Individual Set/Kit components and/or bulk sizes may be available for the TOC standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

ERA is making the most commonly requested products available within 24 hours of order receipt to consistently meet your product needs. Products that are less frequently requested will be shipped within 5 business days of order receipt. Please check your order confirmation for the specific ship date.



OI Aurora

Aurora is a registered trademark of Xylem, Incorporated.



SHIMADZU

The ERA Certified Reference Materials (CRMs) listed are commonly purchased for use with Shimadzu TOC instruments.

Please specify at time of order whether you have a chemical or combustion Shimadzu TOC.

All of ERA's Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. The following CRMs are designed to use on Shimadzu TOC instruments for calibration, validation, and to satisfy regulatory requirements.

System Suitability

Sets – USP / EP	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 40 mL vials.	18000	Ships in 1 business day
Sets – USP	Cat. #	Availability
USP Sterile Water System Suitability Set Includes (1) Reagent Water Rw, (1) 8.0 mg/L C USP Sucrose, and (1) 8.0 mg/L USP 1,4-Benzoquinone in 40 mL vials.	18061	Ships in 5 business days
Sets – JP	Cat. #	Availability
JP System Suitability Set Includes (1) Reagent Water Rw, (1) 0.50 mg/L C from Sodium Dodecylbenzenesulfonate Rss in 40 mL vials.	18000J	Ships in 5 business days
Sets – Low-Level System Suitability	Cat. #	Availability
Low-Level System Suitability Set Includes (1) Reagent Water, (1) 0.30 mg/L C USP Sucrose, and (1) 0.30 mg/L C USP 1,4-Benzoquinone in 40 mL vials.	18040	Ships in 5 business days

Calibration & Validation

Kits	Cat. #	Availability
TOC-V and TOC-L Validation Kit Includes (1) Water Blank and (2) 100.0 mg/L C NIST KHP in 125 mL amber glass bottles.	11002	Ships in 5 business days
TOC-V and TOC-L HS Validation Kit Includes (1) Water Blank and (2) 10.0 mg/L C NIST KHP in 125 mL amber glass bottles.	11003	Ships in 5 business days
TOC-V and TOC-L Wet Chem Validation Kit Includes (3) Water Blanks, (2) 0.50 mg/L C NIST KHP, and (4) 1.0 mg/L C NIST KHP in 40 mL vials.	11004	Ships in 5 business days
TOC-V and TOC-L Multi Calibration Kit Includes (2) Calibration Blanks, (2) each 0.10 mg/L, 0.25 mg/L, 0.50 mg/L C NIST KHP, (1) each 0.75 mg/L and 1.0 mg/L C NIST KHP in 40 mL vials.	11005	Ships in 5 business days



Shimadzu TOC–VWs

Consumables

Kits	Cat. #	Availability
Phosphoric Acid Reagent (1 Liter)*	21016	Ships in 5 business days
Phosphoric Acid Reagent (2 Liter)*	21018	Ships in 5 business days
Persulfate Oxidizer Reagent (1 Liter)*	21017	Ships in 5 business days
Persulfate Oxidizer Reagent (2 Liter)*	21019	Ships in 5 business days

*Dangerous goods.

Individual Set/Kit components and/or bulk sizes may be available for the TOC standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

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Shimadzu TOC–TCs

Accredited ^{Ultraviolet} Fusion USP <643> ISO Guide 34 ^{Carbon} USP
 Certified Reference Material
 TELEDYNE ^{Rss} TEKMAR ^{KHP} TOC ^{C of A}
 Traceable ^{C₈H₅KO₄} System Suitability ^{NaHCO₃} CRM_s
 Total Organic Carbon ^{C₁₂H₂₂O₁₁} NIST TOC ISO 17025 Phoenix Accuracy
 1,4-benzoquinone ^{Global} Response Efficiency ^{C₆H₄O₂} Service
 Combustion ^{Per sulfate} EP 2.2.44

TELEDYNE TEKMAR

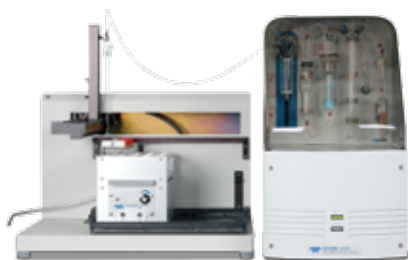
ERA offers a comprehensive suite of calibration and validation Certified Reference Materials (CRMs) designed specifically for Teledyne Tekmar TOC instruments.

All of ERA's Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. The following CRMs are designed to use on Teledyne Tekmar TOC instruments for calibration, validation, and to satisfy regulatory requirements.



Teledyne Tekmar Fusion®

System Suitability		
Sets – USP / EP	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 40 mL vials.	18000	Ships in 1 business day
Sets – USP	Cat. #	Availability
USP Sterile Water System Suitability Set Includes (1) Reagent Water Rw, (1) 8.0 mg/L C USP Sucrose, and (1) 8.0 mg/L USP 1,4-Benzoquinone in 40 mL vials.	18061	Ships in 5 business days
Sets – JP	Cat. #	Availability
JP System Suitability Set Includes (1) Reagent Water Rw, (1) 0.50 mg/L C from Sodium Dodecylbenzenesulfonate Rss in 40 mL vials.	18000J	Ships in 5 business days
Sets – Low-Level System Suitability	Cat. #	Availability
Low-Level System Suitability Set Includes (1) Reagent Water, (1) 0.30 mg/L C USP Sucrose, and (1) 0.30 mg/L C USP 1,4-Benzoquinone in 40 mL vials.	18040	Ships in 5 business days



Tekmar Phoenix® 8000

Phoenix and Fusion are registered trademarks of Teledyne Technologies Incorporated.

Calibration & Validation

Kits	Cat. #	Availability
Ultra Low-Level CRMs Kit Includes (3) Calibration Blanks (1) each 0.050 mg/L, 0.060 mg/L, 0.070 mg/L, 0.080 mg/L, 0.090 mg/L, 0.10 mg/L, 0.25 mg/L, 0.50 mg/L, and 1.0 mg/L C NIST KHP in 40 mL vials.	14203	Ships in 5 business days
Validation Set – Phoenix Includes (2) Water Blanks, (3) 0.50 mg/L C NIST KHP, (6) 1.0 mg/L C NIST KHP, (1) 2.0 mg/L C NIST KHP, (1) 5.0 mg/L C NIST KHP, (1) 50.0 mg/L C NIST KHP, (1) 100 mg/L IC NIST NaHCO ₃ , (1) Reagent Water Rw, (1) 0.50 mg/L C USP Sucrose Rs, and (1) 0.50 mg/L C USP 1,4-Benzoquinone Rss in 40 mL vials.	19002	Ships in 5 business days
Validation Set – Phoenix (New) Includes (5) Water Blanks, (1) 0.50 mg/L C NIST KHP, (5) 1.0 mg/L C NIST KHP, (1) 5.0 mg/L C NIST KHP, (1) 50.0 mg/L C NIST KHP, (1) 1.0 mg/L IC NIST NaHCO ₃ , (1) Reagent Water Rw, (1) 0.50 mg/L C USP Sucrose Rs, and (1) 0.50 mg/L C USP 1,4-Benzoquinone Rss in 40 mL vials.	19003	Ships in 5 business days
Validation Set – Fusion Includes (3) Water Blanks, (3) 1.0 mg/L C NIST KHP, (1) 10.0 mg/L C NIST KHP, (1) 25.0 mg/L IC NIST NaHCO ₃ , (1) Reagent Water Rw, (1) 0.50 mg/L C USP Sucrose Rs, and (1) 0.50 mg/L C USP 1,4-Benzoquinone Rss in 40 mL vials and (1) 5.0 mg/L C NIST KHP in 125 mL amber glass bottle.	19004	Ships in 5 business days

Consumables

Reagents	Cat. #	Availability
Phosphoric Acid Reagent (1 Liter)*	21016	Ships in 5 business days
Phosphoric Acid Reagent (2 Liter)*	21018	Ships in 5 business days
Persulfate Oxidizer Reagent (1 Liter)*	21017	Ships in 5 business days
Persulfate Oxidizer Reagent (2 Liter)*	21019	Ships in 5 business days

*Dangerous goods.

Individual Set/Kit components and/or bulk sizes may be available for the TOC standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

ERA is making the most commonly requested products available within 24 hours of order receipt to consistently meet your product needs. Products that are less frequently requested will be shipped within 5 business days of order receipt. Please check your order confirmation for the specific ship date.

Accuracy
 Service
 Response Efficiency
 1,4-benzoquinone
 USP <643>
 System Suitability
 Certified
 Sucrose
 NaHCO₃
 TOC
 Persulfate
 Certified Reference Material
 Accredited
 ANATEL
 Combustion
 EP 2.2.44
 MIST
 Global
 THORNTON TOC
 KHP
 Validation
 TOC5000
 Ultraviolet
 C₆H₄O₂
 USP
 Rss
 C₁₂H₂₂O₁₁
 ISO Guide 34
 Traceable
 Total Organic Carbon
 ISO 17025
 C of A
 502P
 Rw
 Carbon
 Certainty
 CRMs

THORNTON

ERA offers the highest quality calibration and system suitability kits for your Thornton 5000 TOC meters. For conductivity we offer validation kits that allow an accurate, verifiable, and FDA-compliant approach to validating the sensors you use for USP <645> methods or your own. Please see pages 35-37 for a complete line of conductivity Certified Reference Materials (CRMs).

All of ERA's Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. The following CRMs are designed to use on Thornton 5000 TOC instruments for calibration and to satisfy regulatory requirements.

System Suitability

Sets – USP / EP

	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (2) Reagent Water R _w , (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 500 mL HDPE containers.	18151	Ships in 5 business days

Sets – Low-Level System Suitability

	Cat. #	Availability
Low-Level System Suitability Set Includes (2) Reagent Water, (1) 0.30 mg/L C USP Sucrose, and (1) 0.30 mg/L C USP 1,4-Benzoquinone in 500 mL HDPE containers.	18153	Ships in 5 business days

Calibration

Kits

	Cat. #	Availability
Calibration Kit Includes (2) Calibration Blanks, (1) 0.25 mg/L C NIST Sucrose and (1) 0.50 mg/L C NIST Sucrose in 500 mL HDPE containers.	11414	Ships in 5 business days

Individual Set/Kit components and/or bulk sizes may be available for the TOC standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

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Thornton 5000 TOC with
Multiparameter Transmitter

Validation ISO 17025 Ultraviolet Traceable EP 2.2.44 USP TOC
Lighthouse Accuracy 1,4-benzoquinone NIST
Certified SWAN C₁₂H₂₂O₁₁ Persulfate C₈H₅KO₄ Service Rs
Accredited Sucrose Global C of A R_w Combustion Carbon R_{ss} KHP
CRMs Total Organic Carbon NaHCO₃ System Suitability ISO Guide 34 C₆H₄O₂
Certified Reference Material COMET Response Efficiency USP <643>

OTHER TOC
INSTRUMENTS

OTHER TOC INSTRUMENTS

All of ERA's Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. The following CRMs are designed to use on various brands of TOC instruments for calibration and to satisfy regulatory requirements.

SWAN ANALYTICAL AND COMET ANALYTICS

System Suitability		
Sets – USP / EP	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 250 mL HDPE containers.	18055	Ships in 5 business days
Sets – USP	Cat. #	Availability
USP Sterile Water System Suitability Set Includes (1) Reagent Water Rw, (1) 8.0 mg/L C USP Sucrose, and (1) 8.0 mg/L USP 1,4-Benzoquinone in 250 mL HDPE containers.	18056	Ships in 5 business days
Sets – Low-Level System Suitability	Cat. #	Availability
Low-Level System Suitability Set Includes (1) Reagent Water, (1) 0.30 mg/L C USP Sucrose, and (1) 0.30 mg/L C USP 1,4-Benzoquinone in 250 mL HDPE containers.	18059	Ships in 5 business days
Calibration & Other		
Kits	Cat. #	Availability
Swan Calibration Kit Includes (1) Calibration Blank and (1) 1.0 mg/L C NIST Sucrose in 250 mL HDPE containers.	10035S	Ships in 5 business days
Swan Function Test Kit Includes (1) 20.0 mg/L C Sucrose and (1) 20.0 mg/L C 1,4-Benzoquinone in 125 mL HDPE containers.	19700	Ships in 5 business days

LIGHTHOUSE

System Suitability		
Sets – USP / EP	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 60 mL HDPE containers.	18010	Ships in 1 business day
Calibration		
Kits	Cat. #	Availability
Calibration Kit Includes (1) Calibration Blank and (1) each 0.25 mg/L, 0.50 mg/L, and 0.75 mg/L C NIST Sucrose in 60 mL HDPE containers.	19202	Ships in 1 business day

MEMBRAPURE

System Suitability		
Sets – USP / EP	Cat. #	Availability
USP/EP Bulk Water System Suitability Set Includes (1) Reagent Water Rw, (1) 0.5 mg/L C USP Sucrose, and (1) 0.5 mg/L USP 1,4-Benzoquinone in 500 mL HDPE containers.	18140	Ships in 5 business days
Individual – USP Sterile Water (500 mL HDPE Container)	Cat. #	Availability
USP Reagent Water (Rw)	18144	Ships in 5 business days
8.0 mg/L C USP Sucrose (Rs)	18147	Ships in 5 business days
8.0 mg/L C USP 1,4-Benzoquinone (Rss)	18148	Ships in 5 business days
Individual – Low-Level (500 mL HDPE Container)	Cat. #	Availability
USP Reagent Water (Rw)	18144	Ships in 5 business days
0.3 mg/L C USP Sucrose	18154	Ships in 5 business days
0.3 mg/L C USP 1,4-Benzoquinone	18155	Ships in 5 business days

Calibration		
Individual Standards (500 mL HDPE Container)	Cat. #	Availability
Calibration Blank	10110	Ships in 5 business days
0.5 mg/L C NIST Sucrose	10710	Ships in 5 business days

Individual Set/Kit components and/or bulk sizes may be available for the TOC standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

ERA is making the most commonly requested products available within 24 hours of order receipt to consistently meet your product needs. Products that are less frequently requested will be shipped within 5 business days of order receipt. Please check your order confirmation for the specific ship date.

CONSUMABLES

Global

Ultra low TOC Vials

Tubing

Filters

Sievers 500

PAT700

ANATEL HU

Calibration

USP Monographs

Lamps

Sievers

Pre-cleaned

Quality

Sievers 900

PW

US Pharmacopeia

Vials

ANATEL

Fan filter

Purified water

Scrupulously cleaned

Clean

Sievers 400

USP

Plastic

Sievers 800

Micron in line stainless filter

Organic residue

HPDE Bottles

WFI

Glass

A643

Replacement pump tubing

Vial

Water for injection

CONSUMABLES

Ever wonder what the USP means by: “Use labware and containers that have been scrupulously cleaned of organic residues?”

Just like the USP, we here at ERA demand scrupulously cleaned vials for our TOC standards. All of our vials, whether glass or polymer, represent the most consistently clean sample vials available anywhere. They are the perfect vial for your purified water (PW) or water for injection (WFI) sample analysis.

All ERA vials and bottles, whether glass or polymer, represent the most consistently clean sample containers available anywhere.

United States Pharmacopeia Monographs, Chapter <643> - Total Organic Carbon.

ERA offers consumable products for various TOC instruments as detailed below.

Vials and Bottles

	Cat. #	Availability
40mL Ultra-Low TOC Glass Vials (80/case)	25025	Ships in 1 business day
60 mL Pre-cleaned HDPE Bottles – Natural (1/pack)	25030	Ships in 1 business day
60 mL Pre-cleaned HDPE Bottles – Natural (25/pack)	25031	Ships in 1 business day
60 mL Pre-cleaned HDPE Bottles – Amber (25/pack)	25034	Ships in 5 business days

UV Lamps

Replacement UV Lamps for ANATEL and Sievers models.

	Cat. #	Availability
ANATEL A643 / TOC600	20036A	Ships in 1 business day
ANATEL PAT700	20037	Ships in 1 business day
Sievers 400 / 800	20040	Ships in 1 business day
Sievers 500 / 900	20045	Ships in 1 business day

Reagent Cartridges for Sievers

	Cat. #	Availability
Phosphoric Acid Reagent Cartridge for Sievers 800/900 (150 mL)*	21000	Ships in 5 business days
Phosphoric Acid Reagent Cartridge for Sievers 800/900 (300 mL)*	21001	Ships in 5 business days
Persulfate Oxidizer Reagent Cartridge for Sievers 800/900 (150 mL)*	21005	Ships in 5 business days
Persulfate Oxidizer Reagent Cartridge for Sievers 800/900 (300 mL)*	21006	Ships in 5 business days

*Dangerous goods.

Reagents

	Cat. #	Availability
Phosphoric Acid Reagent (1 Liter)*	21016	Ships in 5 business days
Phosphoric Acid Reagent (2 Liter)*	21018	Ships in 5 business days
Persulfate Oxidizer Reagent (1 Liter)*	21017	Ships in 5 business days
Persulfate Oxidizer Reagent (2 Liter)*	21019	Ships in 5 business days

*Dangerous goods.

Tubing

Replacement Pump Tubing for Sievers models.

	Cat. #	Availability
Sievers 400	20055	Ships in 1 business day
Sievers 800	20050	Ships in 1 business day
Sievers 900	20060	Ships in 1 business day

Filters

	Cat. #	Availability
60 Micron In-Line Stainless Filter	25035	Ships in 5 business days
Fan Filter for Sievers 800	25040	Ships in 5 business days



CLEANING VALIDATION

CLEANING VALIDATION

ERA is your source for coupons, swabs, templates and vials – everything you need for recovery studies and routine verification sampling.

CLEANING VALIDATION

ERA is the premier manufacturer of specialty cleaning validation products – coupons, certified clean sample vials and swabs for swab recovery studies as well as kits that can be customized to suit your laboratory, analyst and validation needs.

Sampling Kit with Vial and Swab

	Cat. #	Availability
Vial and Swab Sampling Kit – Small Includes (20) certified clean swabs and (10) certified clean vials.	CV10000TX	Ships in 5 business days
Vial and Swab Sampling Kit – Large Includes (160) certified clean swabs and (80) certified clean vials.	CV10005TX	Ships in 5 business days

Swabbing Templates

Pre-cleaned Teflon® square swabbing templates are a simple way to ensure accuracy and precision in your cleaning validation sampling. Each pack comes with a Certificate of Analysis for residual HPLC and TOC levels. Swabbing templates can be custom made to your needs. Stainless steel templates are available upon request. Call ERA for pricing, availability, and custom sizing.

	Cat. #	Availability
16 cm² (25 per pack)	30028	Call for Delivery
25 cm² (25 per pack)	30029	Call for Delivery
100 cm² (25 per pack)	30032	Call for Delivery

Swabs

Large polyester swabs with snap-off head for ultra-low interference levels.

	Cat. #	Availability
TOC Swabs (< 50.0 ppb TOC) Includes (20) swabs (1 total bag)	30033TX	Ships in 5 business days
TOC Swabs (< 50.0 ppb TOC) Includes (100) swabs (20/bag, 5 total bags)	30031TX	Ships in 5 business days
HPLC Swabs (Abs 254: 0.1 au max) Includes (100) swabs (50/bag, 2 total bags)	30030	Ships in 5 business days

Custom Coupons

ERA can accommodate your custom requests for coupons of just about any size, shape or material. Please use the general catalog numbers below and provide the information at the bottom to your ERA customer service representative.

	Cat. #	Availability
Polymer	30024	Call for Delivery
Metal	30025	Call for Delivery
Glass	30027	Call for Delivery

Call ERA at 800-372-0122 or 303-431-8454 for a quote on your custom coupon needs in the U.S. Contact your sales partner or e-mail your inquiry to saleseu@eraqc.com in the U.K. Please have the following information available:

Material	Metal, plastic, rubber or glass type (stainless steel, polyethylene, etc.).
Grade	Specific grade of material; like 316 stainless, HDPE or borosilicate glass.
Finish	Arguably the most important factor for metals. The finish refers to the surface roughness and is generally stated in units of "Ra.". It is most often measured using a profilometer.
Coating	Some materials can be coated to offer desirable surface properties.
Etching	Some materials can be etched with serial numbers, swabbing areas or other information.
Dimensions	Size and shape of the coupon.
Quantity	The quantity of coupons needed.

A word cloud graphic on a blue background. The central and largest text is 'REFERENCE STANDARDS' in white. Surrounding it are various terms in different sizes and colors (white, yellow, and light blue). These include: 'Inorganic Carbon', 'pH Buffers', 'High Purity Water', 'Reagents', 'Turbidity', 'Certified Reference Materials', 'ISO Guide 34', 'TOC', 'Sulfuric acid', 'Sodium hydroxide', 'Purified', 'Ultra pure water', 'Laboratory analysis', 'NTU', 'Filter break monitoring', 'EDTA', 'Potassium hydroxide', 'Turbidimetric validation', 'Custom formulations', 'Low TOC Water', 'Pint', 'Gallon', 'Quality', 'Total organic carbon', 'Confidence', 'Analysis', 'Manufacture', 'Stable', 'USP', 'Hydrochloric acid', 'Specialized', 'Certified value', 'Liter', and 'Liquor'. The bottom of the graphic features a decorative pattern of white and light blue squares.

REFERENCE STANDARDS

REFERENCE STANDARDS

Reference Standards

Product Type	Page
Inorganic Carbon	33
Turbidity	33
High-Purity Water	34
pH Buffers	34

INORGANIC CARBON

All of ERA's Certified Reference Materials (CRMs) are prepared using carefully controlled processes that are scrutinized under ERA's ISO Guide 34 accreditation. Inorganic Carbon (IC) is derived from non-living sources and it exists in pharmaceutical waters as carbonate, bicarbonate, and dissolved carbon dioxide (CO₂). Whether your instrument quantifies IC as part of a differential calculation or removes it as part of a "non-purgeable" method of TOC determination, your instrument's ability to remove and/or measure IC must be validated. Below are the most commonly requested IC concentrations for calibration and validation of TOC instrumentation.

Individual CRMs for Inorganic Carbon

	Cat. #	Availability
0.5 mg/L IC from NIST NaHCO ₃ (40 mL)	15990	Ships in 1 business day
1.0 mg/L IC from NIST NaHCO ₃ (40 mL)	16000	Ships in 1 business day
5.0 mg/L IC from NIST NaHCO ₃ (40 mL)	16300	Ships in 1 business day
10.0 mg/L IC from NIST NaHCO ₃ (40 mL)	16600	Ships in 1 business day
25.0 mg/L IC from NIST NaHCO ₃ (40 mL)	16900	Ships in 1 business day
50.0 mg/L IC from NIST NaHCO ₃ (40 mL)	17130	Ships in 1 business day

Bulk sizes may be available for the Inorganic Carbon standards. Please contact your ERA sales representative if you have questions about any products that are not listed in this publication.

ERA is making the most commonly requested products available within 24 hours of order receipt to consistently meet your product needs. Products that are less frequently requested will be shipped within 5 business days of order receipt. Please check your order confirmation for the specific ship date.

TURBIDITY

ERA has manufactured reference materials for turbidity analysis for more than 30 years. ERA's turbidity products are designed specifically for pharmaceutical turbidimetric validation, calibration and monitoring applications. Whether you are performing particle content/concentration monitoring for fermentation progress or filter break monitoring, we guarantee your satisfaction with ERA turbidity reference materials.

Individual Bulk Turbidity Standards in 1 Liter Containers

	Cat. #	Availability
25 NTU	14105	Ships in 5 business days
50 NTU	14106	Ships in 5 business days
100 NTU	14107	Ships in 5 business days
150 NTU	14108	Ships in 5 business days
175 NTU	14109	Ships in 5 business days
200 NTU	14110	Ships in 5 business days
250 NTU	14111	Ships in 5 business days
300 NTU	14112	Ships in 5 business days
350 NTU	14113	Ships in 5 business days
400 NTU	14114	Ships in 5 business days
450 NTU	14115	Ships in 5 business days
500 NTU	14116	Ships in 5 business days

ERA can also manufacture custom turbidity products if you need a standard that is not listed here. Please contact us at 1-800-372-0122 to inquire about custom turbidity reference materials.

HIGH-PURITY WATER

ERA offers Certified Low-TOC Water suitable for use with your TOC or liquid chromatography system. All of our waters are prepared with the highest level of care throughout the Ion-Exchange-Filtration-RO-UV purification process. Our water must pass a rigorous testing scheme and we guarantee the analysis of each bottle as well as your satisfaction.

USP Purified – Certified Low-TOC Water

	Cat. #	Availability
USP Purified Low-TOC Water – 4 Liter	PW10000	Ships in 5 business days
USP Purified Low-TOC Water – 4 x 4 Liter Case	PW10005	Ships in 5 business days

Guaranteed Specifications

pH	5–7
Residue after Evaporation	1 mg/L max
Conductivity (at Bottling)	1.1 µS/cm max @ 20 °C
Total Organic Carbon	50 ppb max
Total Bacterial Count	< 10 cfu/mL
Color (APHA)	5 max
Absorbance	0.1 au max

Elemental Analysis

Ag (Silver)	Max. 0.0004 mg/L	Fe (Iron)	Max. 0.001 mg/L
Al (Aluminum)	Max. 0.002 mg/L	Mn (Manganese)	Max. 0.0004 mg/L
As (Arsenic)	Max. 0.002 mg/L	Mo (Molybdenum)	Max. 0.002 mg/L
B (Boron)	Max. 0.005 mg/L	Ni (Nickel)	Max. 0.0004 mg/L
Ba (Barium)	Max. 0.001 mg/L	Pb (Lead)	Max. 0.001 mg/L
Be (Beryllium)	Max. 0.002 mg/L	Sb (Antimony)	Max. 0.001 mg/L
Cd (Cadmium)	Max. 0.001 mg/L	Se (Selenium)	Max. 0.0001 mg/L
Co (Cobalt)	Max. 0.001 mg/L	Sr (Strontium)	Max. 0.0004 mg/L
Cr (Chromium)	Max. 0.0004 mg/L	Tl (Thallium)	Max. 0.00005 mg/L
Cu (Copper)	Max. 0.0004 mg/L		

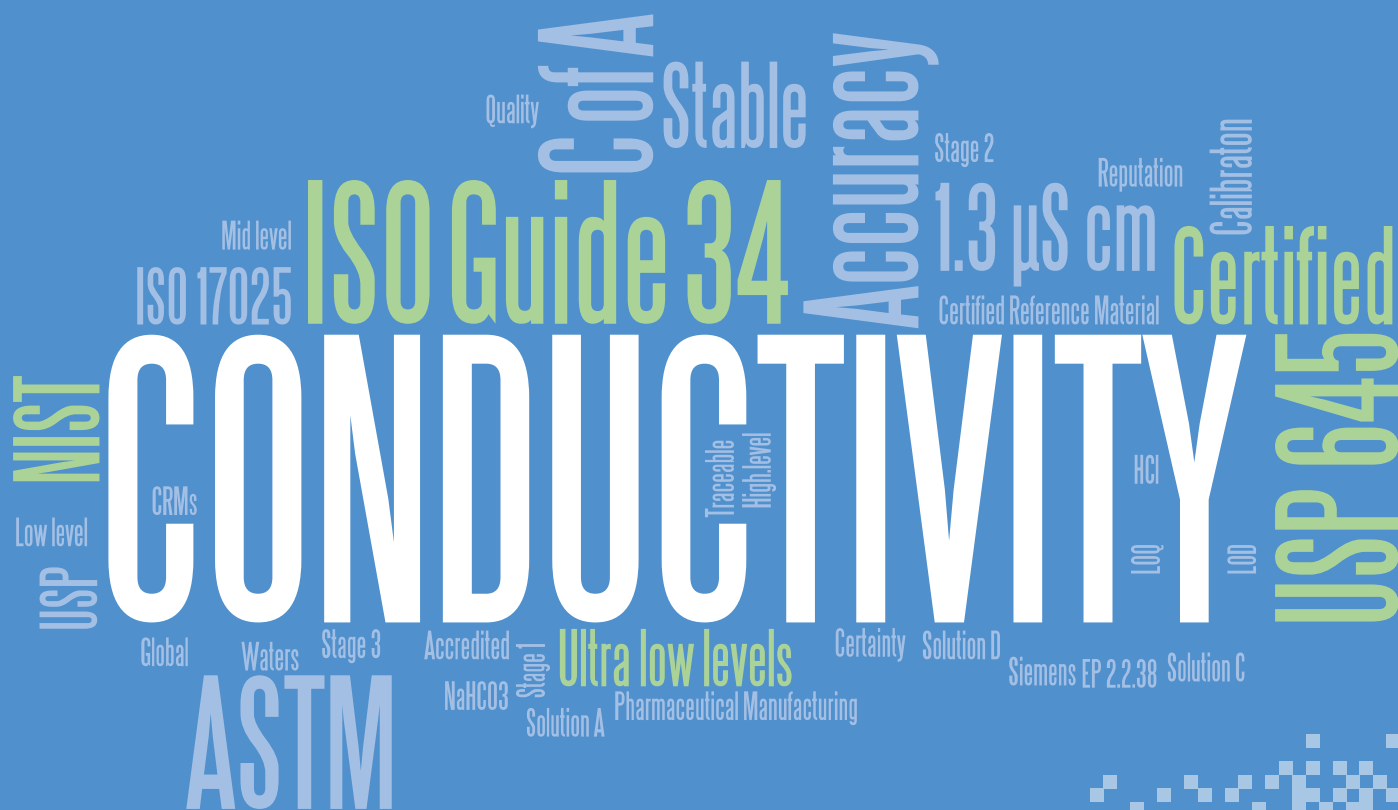
pH BUFFERS

ERA manufactures three color-coded pH Buffers that are prepared under our ISO Guide 34 accreditation. The buffers are mercury free, guaranteed stable for one year, and they are directly traceable to NIST Standard Reference Materials (SRMs). ERA pH Buffers are designed for routine calibration and/or verification of pH meters and they are supplied with a full certificate of analysis.

pH Buffer Products in 500 mL HDPE Containers

	Cat. #	Availability
pH 4 (Red) 1 Bottle	127	Ships in 1 business day
pH 4 (Red) Case of 6 Bottles	128	Ships in 1 business day
pH 7 (Yellow) 1 Bottle	131	Ships in 1 business day
pH 7 (Yellow) Case of 6 Bottles	132	Ships in 1 business day
pH 10 (Blue) 1 Bottle	135	Ships in 1 business day
pH 10 (Blue) Case of 6 Bottles	136	Ships in 1 business day
(2) Each of pH 4, pH 7, and pH 10	141	Ships in 1 business day

ERA manufactures other pH buffers that do not fall under our Guide 34 accreditation. These products are available from our environmental reagents group or as custom products for standard laboratory analysis. Please contact us at 1-800-372-0122 to inquire about custom pH buffers or our line of environmental reagents.



CONDUCTIVITY

ERA is ISO Guide 34 accredited as a Certified Reference Material (CRM) producer and has been manufacturing conductivity standards for more than 30 years. ERA offers solutions and kits that support accurate, verifiable, and approved approaches to validating/verifying your conductivity sensors. Whether you are validating detection limits, determining accuracy and precision, or constructing a low-level linearity curve, ERA has the conductivity products and services to support your efforts.

CONDUCTIVITY

All ERA Conductivity standards are manufactured in a water matrix.

Conductivity Kits

	Cat. #	Availability
Conductivity Validation Kit – Multiple Use Includes (1) 25 uS/cm, (1) 100 uS/cm, (1) 146.93 uS/cm (Solution D), and (1) Reagent Blank for use with Solution D in 500 mL HDPE bottles.	02900	Ships in 5 business days
Solution 25 Test Kit Includes (1) 25 uS/cm standard in a 500 mL HDPE bottle and (5) pre-cleaned 125 mL HDPE wide-mouth bottles.	01100	Ships in 1 business day
Solution 25 Test Kit Includes (1) 25 uS/cm standard in a 1 Liter HDPE bottle and (5) pre-cleaned 125 mL HDPE wide-mouth bottles.	01000	Ships in 1 business day

Low-Level Conductivity (in HDPE bottles)

Our Low-Level conductivity is an excellent verification solution once you have calibrated your system using our ASTM Solution D.

	Cat. #	Availability
5 uS/cm (60 mL)	01301	Ships in 5 business days
5 uS/cm (125 mL)	01302	Ships in 5 business days
5 uS/cm in (500 mL)	01303	Ships in 5 business days
10 uS/cm (60 mL)	01306	Ships in 5 business days
10 uS/cm (125 mL)	01307	Ships in 5 business days
10 uS/cm (500 mL)	01308	Ships in 5 business days
25 uS/cm (500 mL)	01300	Ships in 5 business days
25 uS/cm (1 Liter)	01200	Ships in 5 business days

Mid-Level Conductivity (in HDPE bottles)

Manufactured using NIST traceable materials and certified. This potassium chloride (KCl) solution is an excellent calibration or calibration verification solution. This solution is certified by analysis and it does not require the use of a reference blank for accurate calibration or validation.

	Cat. #	Availability
100 uS/cm (125 mL)	02600	Ships in 5 business days
100 uS/cm (250 mL)	02250	Ships in 5 business days
100 uS/cm in (500 mL)	02500	Ships in 5 business days
100 uS/cm (1 Liter)	02400	Ships in 5 business days

Mid-Level Conductivity ASTM Solution D (in HDPE bottles)

ASTM Solution D is the lowest level solution that can be made following a NIST protocol for conductivity solution preparations. This standard makes an excellent calibration or verification solution together with our 25 uS/cm solution. All Solution D products include an associated Reference Blank.

	Cat. #	Availability
Solution D at 146.93 uS/cm (1 Liter)	01700	Ships in 5 business days
Solution D at 146.93 uS/cm (500 mL)	01800	Ships in 5 business days
Solution D at 146.93 uS/cm (125 mL)	01900	Ships in 5 business days
Solution D Test Kit (1 Liter) Includes (1) Solution D, (1) Reference Blank, and (20) pre-cleaned 125 mL wide-mouth HDPE containers.	01500	Ships in 5 business days
Solution D Test Kit (500 mL) Includes (1) Solution D, (1) Reference Blank, and (10) pre-cleaned 125 mL wide-mouth HDPE containers.	01600	Ships in 5 business days

High-Level Conductivity (in HDPE bottles)

ASTM Solutions C and D are prepared prescriptively from KCl and offers superior accuracy at mid- to high-levels for conductivity sensor validation and verification.

	Cat. #	Availability
ASTM Solution C at 1408.8 uS/cm (125 mL)	01610	Ships in 5 business days
ASTM Solution C at 1408.8 uS/cm (1 Liter)	01620	Ships in 5 business days
1000 uS/cm (125 mL)	01410	Ships in 5 business days
1000 uS/cm (500 mL)	01420	Ships in 5 business days
1000 uS/cm (1 Liter)	01430	Ships in 5 business days
10,000 uS/cm (125 mL)	01630	Ships in 5 business days
10,000 uS/cm (1 Liter)	01640	Ships in 5 business days
100,000 uS/cm (125 mL)	01650	Ships in 5 business days
100,000 uS/cm (500 mL)	01655	Ships in 5 business days
100,000 uS/cm (1 Liter)	01660	Ships in 5 business days
200,000 uS/cm (125 mL)	01661	Ships in 5 business days
200,000 uS/cm (500 mL)	01662	Ships in 5 business days
300,000 uS/cm (125 mL)*	01663	Ships in 5 business days
300,000 uS/cm (500 mL)*	01664	Ships in 5 business days
400,000 uS/cm (125 mL)*	01665	Ships in 5 business days
400,000 uS/cm (500 mL)*	01666	Ships in 5 business days
500,000 uS/cm (125 mL)*	01667	Ships in 5 business days
500,000 uS/cm (500 mL)*	01668	Ships in 5 business days

* Dangerous goods.



www.eraqc.com

Quality Focus

ERA offers custom products manufactured specifically for ultra-pure water and/or environmental applications. ERA's customer service department can assist you with your custom product needs. ERA has experience with the following:

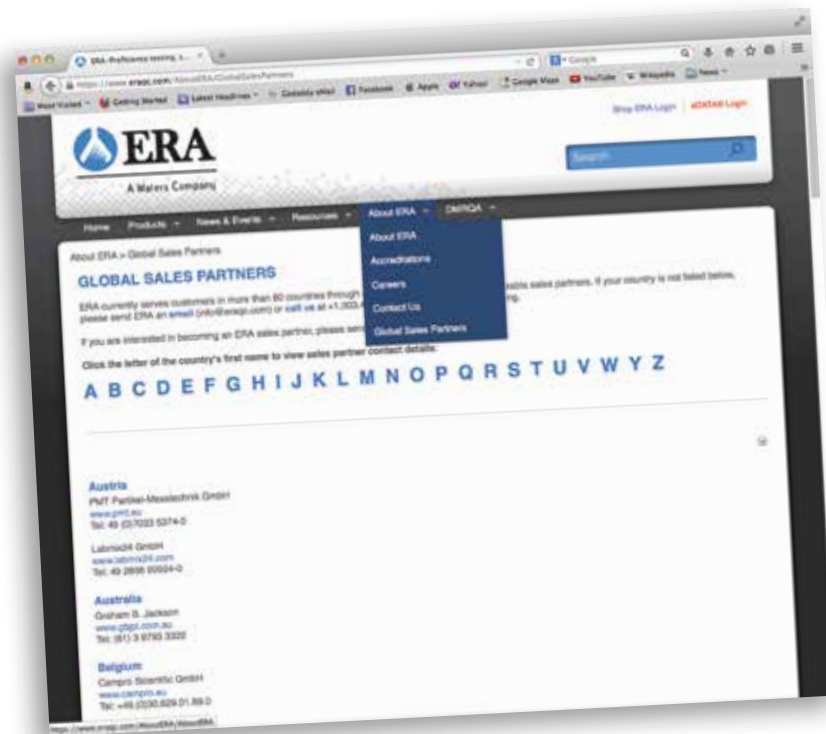
- Total Organic Carbon and Inorganic Carbon mixtures
- Calibration/Linearity/LOD kits for TOC, and conductivity
- Secondary or tertiary source calibration verification standards
- Swab recovery studies
- Project or plant specific Conductivity solutions
- Chemical, microbiological, radiochemical, and air emission analytes
- One standard or hundreds of standards
- Managed methodology studies

Are custom standards expensive?

While the cost of custom standards certainly depends on the complexity of your requirements, the costs for most simple standards is very reasonable. The final cost is dependent on many factors, including the materials used, time required, complexity of the standards and extent of analytical validation required. In every case, you will receive a fixed price quotation based upon your project-specific requirements and you can count on ERA to deliver what you need, when you need it. Now that's versatility.

ERA DISTRIBUTORS AND SALES PARTNERS

ERA currently serves customers in more than 80 countries through an extensive network of knowledgeable distributors and sales partners. Please visit www.eraqc.com to find the name of an authorized distributor in your area or country. Click on the Global Sales Partner link in the About ERA pull down menu. You may also request distributor information by sending an e-mail to ERA_Europe_Sales@waters.com in Europe or info@eraqc.com in the U.S. and the rest of the world.



ERA SUBSCRIPTION SERVICES

ERA can setup subscription orders to meet your specific needs if your internal quality control program requires regularly scheduled analyses for compliance monitoring or routine instrument maintenance. Subscriptions eliminate the need to place recurring orders. Products are delivered on regular schedule and they will always be available when you need them. Some of the benefits include:

- Subscriptions can be designed to match your specific needs (e.g., weekly, monthly, etc.)
- Billing occurs for each individual shipment regardless of how you normally pay for vendor supplied materials
- Changes can be made if necessary during the length of the subscription
- You will have the maximum amount of expiration period for your required reference materials
- Subscriptions can be designed for custom products

Please contact ERA to set up a subscription order or if you have any questions about these services.

HOW TO ORDER

Customers in the U.S. may order ERA's Life Sciences products online at www.eraqc.com or by calling ERA at 800-372-0122 ■ 303-431-8454.

If you live outside the U.S., please contact an authorized ERA distributor to order ERA's Life Sciences products.

Offices

U.S.

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Golden, CO 80403

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info@eraqc.com

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Wexford

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+353 53 91 60549

ERA_Europe_Sales@waters.com

8:00 am – 5:00 pm (GMT) Monday-Friday

TERMS AND CONDITIONS

Credit Cards

ERA accepts MasterCard, VISA, American Express and Discover.



Confirmation

All orders are confirmed to the purchasing contact as long as fax or email information is provided. Please review the confirmation immediately to ensure the accuracy of your order and to verify the ship date.

Pricing

Prices are F.O.B. Golden, CO and or Wexford, Ireland and are subject to change without notice. Subscription prices are firm for the duration of the subscription.

Terms

Terms are net 30 days. Freight charges are prepaid and added to the invoice. A \$10 charge is added to each invoice per shipment to cover regulated materials packaging and handling.

Shipping

Due to the semi-perishable nature of the standards we manufacture, we require the product be shipped for overnight delivery. Please follow instructions and refrigerate immediately upon receipt. Non-perishable items can be shipped per your request.

Safety

ERA products may be hazardous and are intended for use by professional laboratory personnel trained in the competent handling of such materials. Responsibility for the safe use of ERA products rests entirely with the purchaser and user. If you need a Safety Data Sheet (SDS) for any ERA product, please visit www.eraqc.com/resources or call ERA:

U.S. facility: 800-372-0122 ■ 303-431-8454

Ireland facility: +353 53 91 60549

Return/Replacement Policy

Please check all orders immediately upon receipt for accuracy and to ensure that there is no damage. ERA will immediately correct any problems that are reported within five working days of receipt.

NO OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED, IS MADE WITH RESPECT TO THE PRODUCTS AND/OR SERVICES. ERA EXPRESSLY EXCLUDES THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. ERA SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL OR ANY OTHER INDIRECT DAMAGES RESULTING FROM ECONOMIC LOSS.

ERA

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Waters

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720005155EN September 2015 LM-SIG