NEW Universal Wastewater Standard

An exclusive NSI product, our Universal Wastewater Standard is certified for 12 conventional analytes: TOC, BOD_5, CBOD, COD, TSS, pH, $P\text{-}PO_4$, $N\text{-}NH_3$, Conductivity, Total Solids, TDS, and $N\text{-}NO_3$.

The standard is stable and ready-to-use as received. It's also available as a concentrate. See page 11.

NEW GGA Concentrate

A much easier way to prepare GGA test solutions. Our new, certified single use vials are stable and require no pipets. Potential for GGA degradation is eliminated and with quantitative transfer, no dilution errors can occur.
See page 7.

NSI SOLUTIONS INCORPORATED

800-234-7837
www.nsi-es.com

Dear Friends,

Thank you for your interest in our greatly expanded line of inorganic standards.

After a brief review, I think you'll agree that we're not a typical standards manufacturer. Delivery of certified reference materials can be innovative & exciting too!

Most of our Conventional Pollutant LCS Standards are packaged in ready to use formats; all you have to do is shake and pour.

We've sterilized our GGA solutions so they won't degrade and cause you a non-compliance.

We are even packaging many trace level check solutions in a unique "teflon single-use snips" eliminating glassware, dilutions and any possible degradation or contamination.

We've made our chlorine check standard in simple, single use wide neck ampules.
Really easy and reproducible even in the field.

Again, thank you for your interest and please don't hesistate to contact me at 1-800-234-7837 or by email at mark.hammersla@nsi-es.com with suggestions or questions.

Kind Regards,

Mark Hammersla
President

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NEW PRODUCTS!

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Universal Wastewater Standard

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Biosolid QC Standard

A 20 gram real world Class A sewage sludge standard certified for 30 metals, pH, volatile residue, total residue, NH_3-N, TKN, phosphorus, and TOC. Supplied with NIST traceability information, certified values and acceptance limits. Ideal for wastewater laboratories engaged in sludge analysis. See page 5.

Total Chlorine Check Standards

An easy way to QC your residual chlorine analyses. Designed for both colorimetric and amperometric titration methods. For colorimetric methods, dilute contents of an ampule to 25 mL in your curvette. For amperometric methods, dilute contents of an ampule to 200 mL. No pipets, no errors. See page 8.

Turbidity Check Solutions

Our new, ready-to-use turbidity check solutions are traceable to formazin and applicable to all turbidimeters. Available off the shelf at 5 different NTU values. Custom volumes and values can be quickly and economically provided. See page 13.

Teflon Snips

New for NSI, we are offering selected inorganic standards, IC eluents and ICP Cal-Check standards in thermo-sealed Teflon tubes. Teflon Snips are remarkably easy to use. Simply snip off one end of the tube and pour the premeasured solution into the sample vessel. In most cases, no pipeting is required and use of glassware is minimized. See page 4.

IMPROVE YOUR LAB'S DATA QUALITY • SIMPLIFY YOUR OPERATION • IMPROVE COST EFFICIENCIES

Registration #: A8614
ISO 9001:2000

All of these products are supplied with certificates of traceability listing certified concentrations and acceptance limits. NSI Solutions is ISO 9001 registered and an A2LA accredited PT provider. (Certificate #: 2432.01)

919-957-9672 • Fax 919-957-7562 • 800-234-7837 • www.nsi-es.com

TEFLON SNIPS

Convenient and Stable –
Ready to use standards and eluents in single-use Teflon Snips.

New for NSI, we are offering selected inorganic standards and IC eluents in thermo-sealed Teflon tubes.

Teflon Snips are remarkably easy to use. Using a pair of sharp scissors, simply snip off one end of the tube and pour the premeasured solution into the sample vessel. In most cases, no pipeting is required and use of glassware is eliminated.

Ease of use is just the beginning of the story. Teflon is inert to almost everything. Standards and solutions stored in Teflon are not subject to transpiration so trace level standards will maintain integrity for extended periods of time. Stable, certified trace element check standards can now be supplied without fear of rapid degradation. And, you won't have to make any dilutions.

Find the following "snips" throughout this catalog.

On page 19, see our new line of ready to use, NIST Traceable – ICP QC Check Snips. Formulated at trace levels, these multi-element check standards are ready to shoot without dilution or matrix adjustment.

On page 17, you'll find our new line of "IC Eluent Concentrate Snips". These convenient concentrates are simply diluted to 1000 mL to yield working eluent. We've even included new multi-analyte check standards in Teflon Snip packaging.

IC Eluent Concentrate in convenient Teflon Snip.
See page 17.

All of these products are supplied with certificates of traceability listing certified concentrations and acceptance limits. NSI Solutions is ISO 9001 registered and an A2LA accredited PT provider. (Certificate #: 2432.01)

NEW PRODUCTS

GGA Concentrate QCI-081

A much easier way to prepare GGA test solutions. Our new, certified single-use ampules are stable and require no pipets. Potential for GGA degradation is eliminated and with quantitative transfer, no dilution errors can occur.

Universal Wastewater Standard QCI-084

An exclusive NSI product, our Universal Wastewater Standard is certified for 12 conventional analytes: TOC, BOD_5, CBOD, COD, TSS, pH, P-PO_4, N-NH_3, Conductivity, Total Solids, TDS, and N-NO_3. The standard is stable and ready to use as received.

Biosolid QC Standard QCI-151

A 20 gram real world Class A sewage sludge standard certified for 30 metals, pH, volatile residue, total residue, NH_3-N, TKN, phosphorus, and TOC. Supplied with NIST traceability information, certified values, and acceptance limits. Ideal for wastewater laboratories engaged in sludge analysis.

Total Chlorine Check Standards QCI-117, QCI-118, QCI-123, QCI-148, QCI-149, QCI-150

An easy way to QC your daily residual chlorine analysis. For colorimetric methods using 25 mL sample cuvettes, simply dilute contents to 25 mL in cuvette. For amperometric methods, simply dilute contents of an ampule to 200 mL. No pipets, no errors.

Turbidity Check Solutions

Traceable to formazin and ready to use as received. Our new Turbidity Check Solutions are ideal second source check standards. Available off the shelf at 5 levels in both 500 mL and 3.78 liter volumes. Custom specifications are available.
See page 13.

Stable Sulfide Standard QCI-147

Formulated at 10 mg/mL available sulfide in a proprietary buffer matrix in an oxygen free environment. This formulation requires no zinc acetate preservation so no precipitate is formed. Store at 4°C. The standard is stable for at least 12 months from manufacturing. The standard can be used for calibration or as an LCS.

SOLIDS STANDARDS & CONCENTRATES

QC all of your solids analyses with our ready-to-use, NIST traceable solids standards. Stable and remarkably easy to use, simply shake well and pour an appropriate aliquot. No pipeting, no dilutions minimize error. Packaged in an economical 4x1 liter case yielding up to nearly 250 QC analyses for the high level concentrations. Easily customized too!

Low-Level TSS Standard QCI-057 4 x 1 L
Ready-to-Use Bottles

TSS 15-30 mg/L

Mid-Level Solids Standard QCI-055 4 x 1 L
Ready-to-Use Bottles

TDS 500-1500 mg/L
TS 500-1600 mg/L
TSS 60-100 mg/L

High-Level Solids Standard QCI-055H 4 x 1 L
Ready-to-Use Bottles

TDS 1000-3000 mg/L
TS 1400-3500 mg/L
TSS 400-500 mg/L

Custom Solids Standards Available

A twist on our popular whole volume solids standards, these new concentrates are a cinch to use. Just shake a bit and transfer the contents of one vial to 1L. Labeled with our unique "piggy-back" label. Each pack makes 5L of standard. Easily customized too!

Low-Level TSS Standard - Concentrate
QCI-057-50X 5 x 20 mL

A 20 mL screw cap vial for quantitative dilution to 1L. No pipets required. To prepare, shake sample vial vigorously for 30 seconds to disperse solids. Transfer entire contents to 1L flask with several rinses. Bring to volume with reagent water and shake well. Expiration 24 months from receipt.

TSS 15 mg/L

Mid-Level Solids Standard - Concentrate
QCI-055-50X 5 x 20 mL

A 20 mL screw cap vial for quantitative dilution to 1L. No pipets required. To prepare, shake sample vial vigorously for 30 seconds to disperse solids. Transfer entire contents to 1L flask with several rinses. Bring to volume with reagent water and shake well. Expiration 24 months from receipt.

TDS 1000 mg/L
TS 1100 mg/L
TSS 100 mg/L

High-Level Solids Standard - Concentrate
QCI-055H-50X 5 x 20 mL

A 20 mL screw cap vial for quantitative dilution to 1L. No pipets required. To prepare, shake sample vial vigorously for 30 seconds to disperse solids. Transfer entire contents to 1L flask with several rinses. Bring to volume with reagent water and shake well. Expiration 24 months from receipt.

TDS 2000 mg/L
TS 2500 mg/L
TSS 500 mg/L

Ultra High-Level Solids QCI-160 6 x 20 mL

A new product specifically designed to QC your very high solids analysis. Packaged in 20 mL single use vials. Each vial contains Total Solids (3000 mg), Total Dissolved Solids (2800 mg), Total Suspended Solids (200 mg), Total Volatile Solids (63 mg), and Total Volatile Suspended Solids (63 mg).

Residue QC QCI-079 500 mL

A 500 mL ready-to-use whole volume sample to be analyzed for Total Suspended Solids formulated in the NELAC range of 23-100 mg/L and Total Solids formulated in the NELAC range of 140-675 mg/L.

All of these products are supplied with certificates of traceability listing certified concentrations and acceptance limits. NSI Solutions is ISO 9001 registered and an A2LA accredited PT provider. (Certificate #: 2432.01)

BOD/DEMAND STANDARDS

Demand QC QCI-026 21 mL

BOD 15-250 mg/L CBOD 15-250 mg/L
COD 30-250 mg/L TOC 6-100 mg/L
Each ampule yields 2 liters of standard.

Demand QC QCI-062 1 L / QCI-062C 4 x 1 L

Ready-To-Use Bottles

BOD 15-250 mg/L CBOD 15-250 mg/L
COD 30-250 mg/L TOC 6-100 mg/L

The perfect QC Standard for all of your oxygen demand analyses. Formulated with 50/50 GGA and supplied as a sterile solution, this standard responds to your procedures just like your GGA check solution and typical NPW/DMRQA PT samples. Easily customized too!

Universal Wastewater Standard QCI-084 4 x 1 L

Ready-To-Use Glass Bottles

Provided as a sterile solution which can be stored at room temperature prior to opening. Once opened, store tightly capped at 4°C. Demand parameters are derived from 1:1 Glucose:Glutamic Acid at 150 mg/L each.

BOD_5	198 mg/L	CBOD	163 mg/L
COD	292 mg/L	Conductivity	600 umhos
$N\text{-}NH_3$	7.50 mg/L	$N\text{-}NO_3$	3.00 mg/L
pH	7.2 units	$P\text{-}PO_4$	2.50 mg/L
TDS	450 mg/L	TOC	121 mg/L
Total Solids	725 mg/L	TSS	100 mg/L

Designed to reduce the number of standards you need to manage in your lab, our new Universal Wastewater Standard is certified for 12 conventional pollutants. Stable and remarkably easy to use, simply shake and pour an aliquot. Works with all listed EPA approved methods. Easily customized too!

GGA Concentrate QCI-081 24 x 6 mL

A pack of 24 sterilized screw cap vials containing 6 mL of glucose and glutamic acid concentrate (300 mg/L total). Transfer contents of 1 vial to test solution. Yields a 2% dilution of GGA as per SM 5210B. Eliminates drying and weighing the neat chemicals, dilutions, pipeting and potential contamination. 3-year shelf life unopened.

A smarter way to do routine GGA checks. Each single use vial yields the 2% test solution, as per SM5210B, without chance of pipet errors, solution degradation, or contamination. Easily customized too!

GGA Standard QCI-082 125 mL

A 300 mg/L certified GGA Standard packaged in 125 mL amber glass bottle. Sterile until opened. Store at 4°C after opening.

Universal Wastewater Standard Concentrate
See page 11.

TOTAL RESIDUAL CHLORINE

An easy way to QC your daily residual chlorine analysis. For colorimetric methods using 25 mL sample cuvettes, simply dilute contents into a 25 mL in cuvette. For amperometric methods, dilute contents of one ampule to 200 mL. No pipets, no errors.

Ultra Low Chlorine Accuracy Check Standard – 0.100 mg/L
QCI-118 24 x 1.5 mL

A pack of 24 argon sealed ampules to be used to verify the accuracy of your ultra low residual chlorine analysis. Diluting contents of one ampule to 50 mL yields a 0.100 mg/L sample. Packaged in a convenient snap and pour ampule. No pipets required.

Total Chlorine Accuracy Check Standard 1.00 mg/L
QCI-123 24 x 1.5 mL

A pack of 24 flame sealed ampules to be used to verify the accuracy of your residual chlorine analysis. Diluting contents of one ampule to 25 mL yields a 1.00 mg/L sample. Packaged in a convenient snap and pour ampule. No pipets are required.

Total Chlorine Accuracy Check Standard 2.50 mg/L
QCI-117 24 x 1.5 mL

A pack of 24 flame sealed ampules to be used to verify the accuracy of your residual chlorine analysis. Diluting contents of one ampule to 25 mL yields a 2.50 mg/L sample. Packaged in a convenient snap and pour ampule. No pipets are required.

Chlorine Check Standard – Amperometric Titration – 0.1 mg/L
QCI-148 24 x 1.5 mL

A 1.5 mL concentrate for quantitative dilution to 200 mL. Yields a 0.1 mg/L check standard after dilution. Packaged in 24 x 1.5 mL snap and pour wide neck ampules.

Chlorine Check Standard – Amperometric Titration – 1.0 mg/L
QCI-149 24 x 1.5 mL

A 1.5 mL concentrate for quantitative dilution to 200 mL. Yields a 1.0 mg/L check standard after dilution. Packaged in 24 x 1.5 mL snap and pour wide neck ampules.

Chlorine Check Standard – Amperometric Titration – 2.0 mg/L
QCI-150 24 x 1.5 mL

A 1.5 mL concentrate for quantitative dilution to 200 mL. Yields a 2.0 mg/L check standard after dilution. Packaged in 24 x 1.5 mL snap and pour wide neck ampules.

All of these products are supplied with certificates of traceability listing certified concentrations and acceptance limits.
NSI Solutions is ISO 9001 registered and an A2LA accredited PT provider. (Certificate #: 2432.01)

pH STANDARDS

pH QC Standard **QCI-112** **500 mL**
QCI-112C **4 x 500 mL**

Ready-To-Use Bottles

pH 5-10 units

Store at room temperature, just cap tightly after use. At 500 mL per bottle with a 4 bottle case, you'll save more than 50% over competing products. NIST traceable with multiple lots always available.

NEW

Biphthalate Buffer Concentrate – pH4 AC-014

A 100 mL concentrate for quantitative dilution to 1000 mL yields a pH4 standard buffer. NIST traceable. Supplied as a pack of 6 HDPE bottles yielding 6 liters of pH4 standard buffer. (pH 3.99-4.01). Color Coded Red.

NEW

Phosphate Buffer Concentrate – pH7 AC-015

A 100 mL concentrate for quantitative dilution to 1000 mL yields a pH7 standard buffer. NIST traceable. Supplied as a pack of 6 HDPE bottles yielding 6 liters of pH7 standard buffer. (pH 6.99-7.01). Color Coded Yellow.

NEW

Carbonate Buffer Concentrate – pH10 AC-016

A 100 mL concentrate for quantitative dilution to 1000 mL yields a pH10 standard buffer. NIST traceable. Supplied as a pack of 6 HDPE bottles yielding 6 liters of pH10 standard buffer. (pH 9.99-10.01). Color Coded Blue.

Minerals QC Standard — QCI-136 — 500 mL; QCI-136C — 4 x 500 mL

Ready-To-Use Bottles

The classic Wastewater Minerals QC Standard, available as a case or per bottle. With at least 10 lots produced each year, a concentration level meeting your needs is certainly available.

Alkalinity	10-120 mg/L	Conductivity	200-930 umhos
Fluoride	0.3-4 mg/L	Chloride	35-275 mg/L
Potassium	4-40 mg/L	Sodium	6-100 mg/L
Sulfate	5-125 mg/L	TDS	140-650 mg/L

Minerals QC Standard - Concentrate
QCI-136-50X 5 x 20 mL

A 20 mL screw cap vial for quantitative dilution to 500 mL. No pipets required. To prepare, shake vial and transfer contents with rinsings to a 500 mL flask. Bring to volume with reagent water and mix well. Certified values fall within the following ranges:

Alkalinity	10-120 mg/L	Chloride	35-275 mg/L
Conductivity	200-930 umhos	Fluoride	0.30-4.0 mg/L
Potassium	4-40 mg/L	Sodium	6-100 mg/L
Sulfate	5-125 mg/L	TDS	140-650 mg/L

Permit Control QC Standard I QCI-061 4 x 1 L

Ready-to-Use Bottles

QC 6 conventional pollutant analyses with our improved substitute of Alpha-Trol. Each analyte is traceable to NIST-SRMs or masses. Easy to use and stable, simply shake and pour. Minimize errors with no pipeting or diluting necessary. Easily customized too!

COD	343 mg/L	Conductivity	168 umhos
pH	4.2	TOC	141 mg/L
Total Solids	380 mg/L	TSS	80 mg/L

Permit Control QC Standard I - Concentrate
QCI-061-50X 5 x 20 mL

A 20 mL screw cap vial for quantitative dilution to 1L. No pipets required. To prepare, shake sample vigorously for about 30 seconds. Transfer entire contents with rinsings to a 1L flask. Bring to volume with reagent water and shake well.

COD	343 mg/L	Conductivity	168 umhos
pH	4.2	TOC	141 mg/L
Total Solids	380 mg/L	TSS	80 mg/L

A NIST traceable improved substitute for Alpha-Trol. Each package yields 5L of standard. Labeled with our unique "piggy-back" label for easy documentation.

Simple Nutrients — QCI-063 — 500 mL; QCI-063C — 4 x 500 mL

Ready-To-Use Bottles

Simple to use and applicable to any EPA method, nothing is easier. Just pour and analyze. Produced with very high purity source materials. At least 10 lots are available each year making it easy to receive the concentrations meeting your needs. Easily customized too!

$N\text{-}NH_3$	0.65-19 mg/L
$N\text{-}NO_3$	0.25-40 mg/L
$P\text{-}PO_4$	0.50-5.5 mg/L

Complex Nutrients — QCI-064 — 500 mL; QCI-064C — 4 x 500 mL

Ready-To-Use Bottles

TKN	1.50-35 mg/L
Total Phosphorus	0.50-10 mg/L

Easy-to-use 6 analyte QC standards available for both your low level and higher level analyses. Stable and ready to use as received with no diluting or pipeting required. Easily customized too!

Influent Level Inorganics QC Standard
QCI-071 500 mL
QCI-071C 4 x 500 mL

Ready-To-Use Bottles

COD	500 mg/L	NH_3	20 mg/L
NO_3	10 mg/L	PO_4	10 mg/L
SO_4	250 mg/L	TOC	161 mg/L

Effluent Level Inorganics QC Standard
QCI-072 500 mL
QCI-072C 4 x 500 mL

500 mL Ready-To-Use Bottles

COD	25 mg/L	NH_3	1.0 mg/L
NO_3	2.0 mg/L	PO_4	1.0 mg/L
SO_4	25 mg/L	TOC	8.0 mg/L

All of these products are supplied with certificates of traceability listing certified concentrations and acceptance limits. NSI Solutions is ISO 9001 registered and an A2LA accredited PT provider. (Certificate #: 2432.01)

MINERALS AND NUTRIENTS

Minerals and Nutrients

Influent Level Inorganics QC Standard
QCI-071-50X 5 x 20 mL

A 20 mL screw cap vial for quantitative dilution to 500 mL. No pipets required. To prepare, shake vial and transfer contents with rinsings to a 500 mL flask. Bring to volume with reagent water and mix well. The certified values are:

COD	500 mg/L	$N\text{-}NH_3$	20 mg/L
$N\text{-}NO_3$	10 mg/L	$P\text{-}PO_4$	10 mg/L
SO_4	250 mg/L	TOC	161 mg/L

Effluent Level Inorganics QC Standard
QCI-072-50X 5 x 20 mL

A 20 mL screw cap vial for quantitative dilution to 500 mL. No pipets required. To prepare, shake vial and transfer contents with rinsings to a 500 mL flask. Bring to volume with reagent water and mix well. The certified values are:

COD	500 mg/L	$N\text{-}NH_3$	20 mg/L
$N\text{-}NO_3$	10 mg/L	$P\text{-}PO_4$	10 mg/L
SO_4	250 mg/L	TOC	161 mg/L

Universal Wastewater Standard - Concentrate
QCI-084-50X 5 x 20mL

A 20 mL screw cap vial for quantitative dilution to 1L. No pipets needed. Provided as a sterile solution that can be stored at room temperature. Prepared standard must be stored at 4°C. Demand parameters are derived from 1:1 Glucose/Glutamic Acid at 150 mg/L each. Provided with COA listing certified values and acceptance limits.

BOD_5	198 mg/L	CBOD	163 mg/L
COD	292 mg/L	Conductivity	600 umhos
TSS	100 mg/L	$N\text{-}NH_3$	7.50 mg/L
$N\text{-}NO_3$	3.00 mg/L	pH	7.2
$P\text{-}PO_4$	2.50 mg/L	TDS	450 mg/L
Total Solids	725 mg/L	TOC	121 mg/L

QC up to 12 conventional pollutant analyses with a single standard. Supplied in a convenient concentrate, to reduce space requirements, simply quantitatively dilute contents to 1000 mL in your reagent water to yield working concentrations. One pack yields 5L of standard. Labeled with our unique "piggy-back" label. Easily customized too!

Universal Wastewater Standard
QCI-084 4 x 1 L

Ready-To-Use Bottles

Provided as a sterile solution which can be stored at room temperature prior to opening. Once opened, store tightly capped at 4°C. Demand parameters are derived from 1:1 Glucose:Glutamic Acid at 150 mg/L each.

BOD_5	198 mg/L	CBOD	163 mg/L
COD	292 mg/L	Conductivity	600 umhos
TSS	100 mg/L	$N\text{-}NH_3$	7.50 mg/L
$N\text{-}NO_3$	3.00 mg/L	pH	7.2
$P\text{-}PO_4$	2.50 mg/L	TDS	450 mg/L
Total Solids	725 mg/L	TOC	121 mg/L

Oil and Grease **QCI-069** **500 mL**
QCI-069C **4 x 500 mL**
Ready-To-Use Bottles

Works with Freon or Hexane Extraction
Oil and Grease 20-100 mg/L

Ready to analyze by freon or hexane extraction as received. Formulated in units of mg/L with at least 10 lots available per year. An exceptional value at less than half the cost per bottle of competitors. Easily customized too!

Oil and Grease **QCI-069-33,400** **1 Liter**
QCI-069-33,400C **4 x 1 L**
Boston Round Bottle with 33,400 thread size

Designed for use with SPE equipment
Oil and Grease 20-100 mg/L

Ready to use as received with SPE equipment. An exceptional value at 30% less cost per bottle of competitors. At least 10 lots available per year. Easily customized too!

Oil and Grease Method 1664 - Recovery Standard (0.4%)

QCI-003 **25 mL**
QCI-003TP **10 x 25 mL**
Ready-To-Use Bottles

Manufactured specifically for Method 1664 Oil and Grease, this 25 mL solution contains 0.4% (w/v) n-Hexadecane and 0.4% (w/v) Stearic acid in Acetone. Certificate of Analysis accompanies the product.

Oil and Grease Method 1664 - Recovery Standard (0.2%)

QCI-003L **10 mL**
QCI-003LTP **25 x 10 mL**
Ready-To-Use Bottles

Manufactured specifically for Method 1664 Oil and Grease, this solution contains 0.2% (w/v) n-Hexadecane and 0.2% (w/v) Stearic acid in Acetone. Certificate of Analysis accompanies the product.

Traceable to formazin and ready to use as received. Our new Turbidity Check Standard Solutions are ideal second source check standards. Available off the shelf at 5 levels in both 500 mL and 3.78 liter volumes. Custom specifications are available.

Turbidity QC Check Solutions

	500 mL	4 x 500 mL	3.78 Liter
100 NTU	QCI-152	QCI-152C	QCI-152L
50 NTU	QCI-153	QCI-153C	QCI-153L
25 NTU	QCI-154	QCI-154C	QCI-154L
10 NTU	QCI-155	QCI-155C	QCI-155L
5 NTU	QCI-156	QCI-156C	QCI-156L

Wastewater Turbidity QC Standard QCI-092

A 21 mL concentrate for determination of turbidity in the NELAC NPW range of 1-20 NTU after dilution of 1:100. Each vial yields 2 liters of solution. Provided with a Certificate of Analysis detailing assigned value and acceptance limits.

Drinking Water Turbidity QC Standard QCI-014

A 21 mL concentrate for determination of turbidity in the NELAC Drinking Water range of 0.500-8.00 NTU after dilution of 1:100. Each vial yields 2 liters of solution. Provided with a Certificate of Analysis detailing assigned value and acceptance limits.

Custom Turbidity Standards Available

Registration #: A8614
ISO 9001:2000

All of these products are supplied with certificates of traceability listing certified concentrations and acceptance limits. NSI Solutions is ISO 9001 registered and an A2LA accredited PT provider. (Certificate #: 2432.01)

Fecal Coliform/E. coli Positive Control Standard 100 CFU

MIC-QC7S 1 sample
MIC-QC7 20 samples

A pack of 20 individually packaged, certified and stabilized *E. coli* samples for use as quantitative positive controls. To use, hydrate the sample in 100 mL of sterile water at 37°C. Dissolves completely in less than 15 minutes. Analyze by your normal methods. Each sample contains 100 CFU. 12 month shelf life after receipt. No licensing agreement required. ATCC #11775 equivalent.

Enterococci – Positive Control Standard 100 CFU

MIC-QC11S 1 sample
MIC-QC11 20 samples

A pack of 20 individually packaged *Enterococcus faecalis* samples for use as a quantitative positive control for your enterococci analysis. To use, hydrate sample in 100 mL of sterile water at 37°C. Each sample contains 100 CFU. 12 months shelf life after receipt. No licensing agreement required. ATCC #19433 equivalent.

Fecal Coliform/E. coli Negative Control Standard 100 CFU

MIC-QC8S 1 sample
MIC-QC8 20 samples

A pack of 20 individually packaged and stabilized *Pseudomonas aeriginosa* samples for use as negative controls for coliform and *E. coli* analysis. To use, hydrate the sample in 100 mL of sterile water at 37° C. Dissolves completely in less than 15 minutes. Analyze by your normal methods. Each sample contains 100 CFU. 12 month shelf life after receipt. No licensing agreement required.

Fecal Coliform/E. coli Negative Control Standard 100 CFU

MIC-QC9S 1 sample
MIC-QC9 20 samples

A pack of 20 individually packaged and stabilized *Enterobacter aerogenes* samples for use as negative controls for coliform and *E. coli* analysis. To use, hydrate the sample in 100 mL of sterile water at 37° C. Dissolves completely in less than 15 minutes. Analyze by your normal methods. Each sample contains 100 CFU. 12 month shelf life after receipt. No licensing agreement required.

Fecal Coliform/E. coli Negative Control Standard 100 CFU

MIC-QC10S 1 sample
MIC-QC10 20 samples

A pack of 20 individually packaged and stabilized *Klebsiella pneumoniae* samples for use as negative controls for coliform and *E. coli* analysis. To use, hydrate the sample in 100 mL of sterile water at 37°C. Dissolves completely in less than 15 minutes. Analyze by your normal methods. Each sample contains 100 CFU. 12 month shelf life after receipt. No licensing agreement required.

Conductivity Standards

SC-10	10 umhos/cm	4 x 1000 mL
SC-50	50 umhos/cm	4 x 1000 mL
SC-100	100 umhos/cm	4 x 1000 mL
SC-500	500 umhos/cm	4 x 1000 mL
SC-1000	1000 umhos/cm	4 x 1000 mL
SC-1413	1413 umhos/cm	4 x 1000 mL

Product	100 mL Catalog #	500 mL Catalog #
Alkalinity - 1000 ppm	IS-012-100	IS-012-500
NH_3 - 1000 ppm	IS-002-100	IS-002-500
N-NH_3 - 1000 ppm	IS-003-100	IS-003-500
Boron - 1000 ppm	IS-023-100	IS-023-500
Bromate - 1000 ppm	IS-030-100	IS-030-500
Bromide - 1000 ppm	IS-019-100	IS-019-500
Chlorate - 1000 ppm	IS-032-100	IS-032-500
Perchlorate - 1000 ppm	IS-027-100	IS-027-500
Chloride - 1000 ppm	IS-013-100	IS-013-500
Chlorite - 1000 ppm	IS-031-100	IS-031-500
COD - 1000 ppm	IS-001-100	IS-001-500
Cr VI - 1000 ppm	IS-025-100	IS-025-500
Cyanide (complex) - 1000 ppm	IS-024-100	IS-024-500
Free Cyanide - 1000 ppm	IS-029-100	IS-029-500
WAD Cyanide - 1000 ppm	IS-036-100	IS-036-500
Flouride - 1000 ppm	IS-016-100	IS-016-500
Total Hardness - 1000 ppm	IS-017-100	IS-017-500
*MBAs - 1000 ppm	QCI-054 (10 mL)	———
NO_3 - 1000 ppm	IS-005-100	IS-005-500
N-NO_3 - 1000 ppm	IS-011-100	IS-011-500
NO_2 - 1000 ppm	IS-004-100	IS-004-500
N-NO_2 - 1000 ppm	IS-010-100	IS-010-500
Total Phosphorus - 1000 ppm	IS-006-100	IS-006-500
PO_4 - 1000 ppm	IS-007-100	IS-007-500
P-PO_4 - 1000 ppm	IS-008-100	IS-008-500
Silica - 1000 ppm	IS-021-100	IS-021-500
SO_4 - 1000 ppm	IS-015-100	IS-015-500
Stable Sulfide - 1000 ppm	QCI-147 (6 x 1.5 mL)	———
TKN - 1000 ppm	IS-009-100	IS-009-500
*TOX - 1000 ppm	IS-022-100 (5 x 21mL)	———

*Supplied in ampules only.

PREPARED USING THE HIGHEST PURITY NEAT MATERIALS AND VERIFIED USING THE SAME PROCEDURES AS OUR CERTIFIED PT SAMPLES.

Registration #: A8614
ISO 9001:2000

All of these products are supplied with certificates of traceability listing certified concentrations and acceptance limits. NSI Solutions is ISO 9001 registered and an A2LA accredited PT provider. (Certificate #: 2432.01)

Our IC standards and eluents are manufactured in our ISO 9001 registered facility from the highest purity ingredients. Each lot is certified for accuracy, purity, and homogeneity against NIST-SRMs by Ion-Chromatography after bottling. A Certificate of Analysis listing exact analyte concentration, uncertainty, and NIST SRM traceability accompanies each standard. NSI Solutions IC Standards and Eluent concentrates will improve the reliability of your analysis and improve your lab's productivity.

Single Analyte Standard 1000 mg/L	Source Material	Catalog Number
Ammonium	NH_4Cl	IC-001
Barium	$Ba(NO_3)_2$	IC-003
Bromate	$NaBrO_3$	IC-004
Bromide	KBr	IC-007
Calcium	CaO	IC-008
Chlorate	$KClO_3$	IC-010
Chloride	KCl	IC-013
Chlorite	$NaClO_2$	IC-016
Cyanide	KCN	IC-019
Fluoride	NaF	IC-022
Lithium	Li_2CO_3	IC-023
Magnesium	$Mg(NO_3)_2$	IC-024
Nitrate	$NaNO_3$	IC-025
Nitrate-Nitrogen	$NaNO_3$	IC-028
Nitrite	$NaNO_2$	IC-031
Nitrite-Nitrogen	$NaNO_2$	IC-034
Perchlorate	$NaClO_4$	IC-037
Phosphate	NH_4H2PO_4	IC-040
Phosphate-Phosphorus	NH_4H2PO_4	IC-043
Potassium	KNO_3	IC-042
Sodium	Na_2CO_3	IC-046
Sulfate	K_2SO_4	IC-049

All standards are 100 mL.

Custom IC standards are available to meet your exact analyte, concentration, and volume requirements. Custom blends can be provided in as little as 48 hours after order receipt. Call 1-800-234-7837 or email at nsi@nsi-es.com to inquire.

7 Anion Standard 1		IC-7-1	100 mL
Fluoride	20 mg/L	Nitrate	100 mg/L
Chloride	30 mg/L	Phosphate	150 mg/L
Nitrite	100 mg/L	Sulfate	150 mg/L
Bromide	100 mg/L		

7 Anion Standard 2		IC-7-2	100 mL
Fluoride	20 mg/L	Nitrate	100 mg/L
Chloride	100 mg/L	Phosphate	200 mg/L
Nitrite	100 mg/L	Sulfate	100 mg/L
Bromide	100 mg/L		

5 Anion Standard		IC-5-1	100 mL
Fluoride	20 mg/L	Phosphate	150 mg/L
Chloride	30 mg/L	Sulfate	150 mg/L
Nitrate	100 mg/L		

6 Cation Standard		IC-6-1	100 mL
Ammonium	400 mg/L	Potassium	200 mg/L
Calcium	1000 mg/L	Sodium	200 mg/L
Lithium	50 mg/L	Magnesium	200 mg/L

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Eluent Concentrates—Improve Productivity with Single-Use Teflon Snips

All of our eluent concentrates are prepared from 18 megohm water and ultra-pure chemicals. Each is prepared as a 100x concentrate packaged in exact 10 mL aliquots. Each Teflon Snip yields 1000 mL of eluent. To prepare an eluent solution, quantitatively transfer contents of a vial to 1000 mL flask and bring to volume with reagent water. No measuring or pipeting or potential for contamination.

Eluent Solution Concentrate (100x)	Concentration	25 Pack Catalog Number	50 Pack Catalog Number
Carbonate/bicarbonate	0.18M/0.17M	EL-001-25	EL-001-50
Carbonate/bicarbonate	0.22M/0.28M	EL-002-25	EL-002-50
Carbonate/bicarbonate	0.30M/0.24M	EL-003-25	EL-003-50
Carbonate/bicarbonate	0.35M/0.10M	EL-004-25	EL-004-50
Carbonate/bicarbonate	0.45M/0.08M	EL-005-25	EL-005-50
Carbonate/bicarbonate	0.45M/0.14M	EL-006-25	EL-006-50
Carbonate/bicarbonate	0.80M/0.10M	EL-007-25	EL-007-50
Carbonate	0.50M	EL-008-25	EL-008-50
Bicarbonate	0.50M	EL-009-25	EL-009-50

IC LCS solutions are conveniently packaged in single-use Snips. To use, simply snip open the Teflon tube and pour contents directly into sample cup. Save the remainder in plastic vial. Provided with a Certificate of Analysis and NIST traceability data. No mixing, no dilutions, just use as received.

7 Anion LCS Snip	IC-7-SNIP	25 x 10 mL
Fluoride 2 mg/L	Nitrate 10 mg/L	
Chloride 3 mg/L	Phosphate 15 mg/L	
Nitrite 10 mg/L	Sulfate 15 mg/L	
Bromide 10 mg/L		

6 Cation LCS Snip	IC-6-SNIP	25 x 10 mL
Ammonium 40 mg/L	Potassium 20 mg/L	
Calcium 100 mg/L	Sodium 20 mg/L	
Lithium 5 mg/L	Magnesium 20 mg/L	

CERTIFICATION/CUSTOM STANDARDS

Certification

NSI Solutions, Inc. supplies the finest analytical standards to the laboratory community. As an ISO registered, A2LA accredited PT provider, NSI's metals standards are guaranteed to be produced the right way every time, whether they are for an AA, ICP, or ICP-MS.

All of our metals standards are prepared from high-purity metals or salts in sub-boiled distilled acids and 18 mega-ohm deionized water. The accuracy of each standard is guaranteed to be +/- 0.5% of the stated concentration against a NIST-SRM spectrometric standard solutions.

At NSI, we are always working to improve those things we already do and to manufacture new standards of superior quality. Our new Teflon Snip standards seen on the opposing page are yet one more way we are trying to bring our outstanding quality to your laboratory!

Custom Standards

We have specifically designed our formulations and manufacturing processes to be flexible so we can meet almost any of your requirements quickly and economically. If you don't find what you need in this catalog, contact us at 1-800-234-7837 or by email at nsi@nsi-es.com to discuss your custom requirements.

With well over 3,000 characterized, neat chemicals and a full quality control laboratory maintained in-house, we very likely can design a solution to meet your needs.

Registration #: A8614
ISO 9001:2000

All of these products are supplied with certificates of traceability listing certified concentrations and acceptance limits. NSI Solutions is ISO 9001 registered and an A2LA accredited PT provider. (Certificate #: 2432.01)

TRACE METAL SNIPS

An exclusive NSI product, Trace Metal Snips are NIST traceable multi-element check standards formulated at working levels packaged in single use volumes in inert Teflon tubes. To use, simply snip open the tube and pour contents into an autosampler cup. No blending or diluting required.

ICP QC 28 Snip

Ag	Cu	Sb
Al	Fe	Se
As	K 10 ug/mL	Si 0.50 ug/mL
B	Li	Sr
Ba	Mg	Ti
Be	Mn	Tl
Ca	Mo	V
Cd	Na	Zn
Co	Ni	
Cr	Pb	

All 1.00 ug/mL except where noted in 2% HNO_3/tr HF
10 mL, Teflon Snips

ICPSNIP-28 25 x 10 mL

ICP QC 21 Snip

As	Mo
Be	Ni
Ca	Pb
Cd	Sb
Co	Se
Cr	Ti
Cu	Tl
Fe	V
Mg	Zn
Mn	

At 1.00 ug/mL in 2% HNO_3/tr HF
10 mL, Teflon Snips

ICPSNIP-21 25 x 10 mL

ICP QC 7 Snip

Ag	1.00 ug/mL
Al	1.00 ug/mL
B	1.00 ug/mL
Ba	1.00 ug/mL
K	10 ug/mL
Na	1.00 ug/mL
Si	0.50 ug/mL

At specified concentrations in 2% HNO_3/tr HF
10 mL in Teflon Snips

ICPSNIP-7 25 x 10 mL

ICP QC – RCRA 8

As
Ba
Cd
Cr
Pb
Hg
Se
Ag

At 1.00 ug/mL in 2% HNO_3 10 mL, Teflon Snips

ICPSNIP-RCRA8 25 x 10 mL

ICP Interference Check Standard 1

Ag	3.00 ug/mL	K	200 ug/mL
As	10.0 ug/mL	Mn	2.00 ug/mL
Ba	3.00 ug/mL	Ni	3.00 ug/mL
Be	1.00 ug/mL	Pb	10.0 ug/mL
Cd	3.00 ug/mL	Se	5.00 ug/mL
Co	3.00 ug/mL	Tl	10.0 ug/mL
Cr	3.00 ug/mL	V	3.00 ug/mL
Cu	3.00 ug/mL	Zn	3.00 ug/mL

At specified concentrations in 2% HNO_3
10 mL, Teflon Snips

ICPIFSNIP-1 25 x 10 mL

ICP Interference Check Standard 2

Al	60 ug/mL
Ca	300 ug/mL
Fe	250 ug/mL
Mg	150 ug/mL
Na	50 ug/mL

At specified concentrations in 2% HNO_3 10 mL, Teflon Snips

ICPIFSNIP-2 25 x 10 mL

ICP Interference Check Standard A IF-CK-A 100 mL

B	500 ug/mL	Si	230 ug/mL
Mo	300 ug/mL	Ti	1000 ug/ml

At specified concentrations in dil HNO_3/tr HF

ICP Interference Check Standard B IF-CK-B 100 mL

Sb

At 1000 ug/mL in dil HNO_3/Tartaric Acid

ICP Interference Check Standard C IF-CK-C 100 mL

Ag	300 ug/mL	K	20,000 ug/mL
As	1000 ug/mL	Mn	200 ug/mL
Ba	300 ug/mL	Ni	300 ug/mL
Be	100 ug/mL	Pb	1000 ug/mL
Cd	300 ug/mL	Se	500 ug/mL
Co	300 ug/mL	Tl	1000 ug/mL
Cr	300 ug/mL	V	300 ug/mL
Cu	300 ug/mL	Zn	300 ug/mL

At specified concentrations in dil HNO_3

ICP Interference Check Standard D IF-CK-D 100 mL

Al	3000 ug/mL	Mg	7500 ug/mL
Ca	15,000 ug/mL	Na	2500 ug/mL
Fe	12,500 ug/mL		

At specified concentrations in dil HNO_3

ICP QC Standard 1 ICPQC-1 100 mL

Ag	25 ug/mL	K	500 ug/mL
Al	100 ug/mL	Li	100 ug/mL
As	200 ug/mL	Mg	100 ug/mL
B	100 ug/mL	Mn	100 ug/mL
Ba	100 ug/mL	Na	100 ug/mL
Be	100 ug/mL	Ni	100 ug/mL
Ca	100 ug/mL	P	500 ug/mL
Cd	100 ug/mL	Pb	200 ug/mL
Ce	100 ug/mL	Se	100 ug/mL
Co	100 ug/mL	Sr	100 ug/mL
Cr	100 ug/mL	Tl	500 ug/mL
Cu	100 ug/mL	V	100 ug/mL
Fe	100 ug/mL	Zn	100 ug/mL
Hg	200 ug/mgL		

At specified concentrations in dil HNO_3

ICP QC Standard 2 ICPQC-2 100 mL

Mo	100 ug/mL	Sb	200 ug/mL
SiO_2	500 ug/mL	Sn	500 ug/mL
Ti	100 ug/mL		

At specified concentrations in dil HNO_3/tr HF

ICP QC Standard 19 ICPQC-19 100 mL

As	Cu	Pb
Be	Fe	Sb
Ca	Mg	Tl
Cd	Mn	V
Co	Mo	Zn
Cr	Ni	

At 100 ug/mL in dil HNO_3/tr HF

Custom Blends Available

METAL STANDARDS

Metal Standards

ICP QC Standard 26 ICPQC-26 100 mL

Ag	100 ug/mL	Mg	100 ug/mL
Al	100 ug/mL	Mn	100 ug/mL
As	100 ug/mL	Mo	100 ug/mL
B	100 ug/mL	Na	100 ug/mL
Ba	100 ug/mL	Ni	100 ug/mL
Be	100 ug/mL	Pb	100 ug/mL
Ca	100 ug/mL	Sb	100 ug/mL
Cd	100 ug/mL	Se	100 ug/mL
Co	100 ug/mL	Si	50 ug/mL
Cr	100 ug/mL	Ti	100 ug/mL
Cu	100 ug/mL	Tl	100 ug/mL
Fe	100 ug/mL	V	100 ug/mL
K	1000 ug/mL	Zn	100 ug/mL

At specified concentrations in dil HNO_3/tr HF

ICP QC Standard 28 ICPQC-28 100 mL

Ag	100 ug/mL	Mg	100 ug/mL
Al	100 ug/mL	Mn	100 ug/mL
As	100 ug/mL	Mo	100 ug/mL
B	100 ug/mL	Na	100 ug/mL
Ba	100 ug/mL	Ni	100 ug/mL
Be	100 ug/mL	Pb	100 ug/mL
Ca	100 ug/mL	Sb	100 ug/mL
Cd	100 ug/mL	Se	100 ug/mL
Co	100 ug/mL	Si	50 ug/mL
Cr	100 ug/mL	Sr	100 ug/mL
Cu	100 ug/mL	Ti	100 ug/mL
Fe	100 ug/mL	Tl	100 ug/mL
K	1000 ug/mL	V	100 ug/mL
Li	100 ug/mL	Zn	100 ug/mL

At specified concentrations in dil HNO_3/tr HF

Method 200.7 - 7 Element QC Blend
ICPQC-7 100 mL

Ag	100 ug/mL	K	1000 ug/mL
Al	100 ug/mL	Na	100 ug/mL
B	100 ug/mL	Si	50 ug/mL
Ba	100 ug/mL		

At specified concentrations in dil HNO_3/tr HF

Method 200.7 - 21 Element QC Blend
ICPQC-21 100 mL

As	Cu	Ni	Ti
Be	Fe	Pb	Tl
Ca	Li	Sb	V
Cd	Mg	Se	Zn
Co	Mn	Sr	
Cr	Mo		

At 100 ug/mL each in dil HNO_3/tr HF

Method 200.7 - 26 Element QC Blend
ICPQC-26 100 mL

Ag (25 ug/mL)	K (500 ug/mL)
Al	Li
As (200 ug/mL)	Mg
B	Mn
Ba	Na
Be	Ni
Ca	P (500 ug/mL)
Cd	Pb
Ce	Se
Co	Sr
Cr	Tl
Cu	V
Fe	Zn

All 100 ug/mL except where noted in dil HNO_3

ICP-MS 43 Element Blend ICPMS-43 100 mL

Ag	Co	Gd	Ni	Th
Al	Cr	Ho	P	Tl
As	Cs	K	Pb	Tm
B	Cu	La	Pr	U
Ba	Dy	Lu	Rb	V
Be	Er	Mg	S	Yb
Ca	Eu	Mn	Se	Zn
Cd	Fe	Na	Sm	
Ce	Ga	Nd	Sr	

At 10 ug/mL in dil HNO_3

ICP-MS Lithium ICPMS-5 100 mL

Li

At 10 ug/mL in dil HNO_3

ICP-MS 12 Element Blend ICPMS-12 100 mL

Ge	Sn
Hf	Ta
Mo	Te
Nb	Ti
Sb	W
Si	Zr

At 10 ug/mL in dil HNO_3

ICP-MS Mercury ICPMS-6 100 mL

Hg

At 10 ug/mL in dil HNO_3

ICP-MS Internal Standard ICPMS-IS 100 mL

Bi	Sc
In	Tb
Li	Y

At 10 ug/mL in dil HNO_3

ICP-MS Rare Earth Standard ICPMS-RE 100 mL

Ce	Ho	Sc	U
Dy	La	Sm	Y
Er	Lu	Tb	Yb
Eu	Nd	Th	
Gd	Pr	Tm	

At 10 ug/mL in dil HNO_3

ICP-MS Precious Metal Standard ICPMS-PM 100 mL

Au	Re
Ir	Rh
Pd	Ru
Pt	Te

At 10 ug/mL in dil HCl

ICP-MS Flouride Standard ICPMS-8 100 mL

Ge	Ta
Hf	Ti
Mo	W
Nb	Zr
Sn	

At 10 ug/mL in dil HNO_3/tr HF

METAL STANDARDS

Metal Standards

ICP-MS Hot Plasma Standard ICPMS-HP 100 mL

As	In
B	Pb
Ba	Sb
Be	Se
Bi	Tl
Cd	V
Ga	

At 10 ug/mL in dil HNO_3

ICP-MS Cool Plasma Standard ICPMS-CP 100 mL

Ag	Li
Al	Mg
Ca	Mn
Co	Na
Cr	Ni
Cs	Rb
Cu	Sr
Fe	Zn
K	

At 10 ug/mL in dil HNO_3

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AA STANDARDS

ELEMENT	SOURCE	MATRIX	Part No.	Size in mL	Part No.	Size in mL
Aluminum	Al Metal 99.999%	dil HNO_3	AAS-001	100 mL	AAS-001-5	500 mL
Antimony	Sb Metal 99.999%	dil HNO_3/tr HF	AAS-002	100 mL	AAS-002-5	500 mL
Arsenic	As Metal 99.999%	dil HNO_3	AAS-003	100 mL	AAS-003-5	500 mL
Barium	$BaCO_3$ 99.999%	dil HNO_3	AAS-004	100 mL	AAS-004-5	500 mL
Beryllium	Be Metal 99.995%	dil HNO_3	AAS-005	100 mL	AAS-005-5	500 mL
Boron	Boric Acid 99.999%	Water	AAS-028	100 mL	AAS-028-5	500 mL
Cadmium	Cd Metal 99.999%	dil HNO_3	AAS-006	100 mL	AAS-006-5	500 mL
Calcium	$CaCO_3$ 99.999%	dil HNO_3	AAS-024	100 mL	AAS-024-5	500 mL
Chromium	Cr Metal 99.999%	dil HNO_3	AAS-007	100 mL	AAS-007-5	500 mL
Cobalt	Co Metal 99.999%	dil HNO_3	AAS-008	100 mL	AAS-008-5	500 mL
Copper	Cu Metal 99.999%	dil HNO_3	AAS-009	100 mL	AAS-009-5	500 mL
Iron	Fe Metal 99.999%	dil HNO_3	AAS-010	100 mL	AAS-010-5	500 mL
Lead	Pb Metal 99.999%	dil HNO_3	AAS-011	100 mL	AAS-011-5	500 mL
Magnesium	Mg Metal 99.999%	dil HNO_3	AAS-026	100 mL	AAS-026-5	500 mL
Manganese	Mn Metal 99.999%	dil HNO_3	AAS-012	100 mL	AAS-012-5	500 mL
Mercury	Hg Metal 99.999%	dil HNO_3	AAS-022	100 mL	AAS-022-5	500 mL
Molybdenum	Mo Metal 99.999%	dil HNO_3	AAS-013	100 mL	AAS-013-5	500 mL
Nickel	Ni Metal 99.999%	dil HNO_3	AAS-014	100 mL	AAS-014-5	500 mL
Palladium	$Pd(NO_3)_2$ 99.999%	dil HNO_3	AAS-029	100 mL	AAS-029-5	500 mL
Platinum	K_2PtCl_6 99.999%	dil HCl	AAS-030**	100 mL	AAS-030-5**	500 mL
Potassium	KNO_3 99.999%	dil HNO_3	AAS-025	100 mL	AAS-025-5	500 mL
Selenium	Se Metal 99.999%	dil HNO_3	AAS-015	100 mL	AAS-015-5	500 mL
Silver	Ag Metal 99.999%	dil HNO_3	AAS-023	100 mL	AAS-023-5	500 mL
Sodium	$NaNO_3$ 99.995%	dil HNO_3	AAS-027	100 mL	AAS-027-5	500 mL
Strontium	$SrCO_3$ 99.999%	dil HNO_3	AAS-016	100 mL	AAS-016-5	500 mL
Thallium	Tl Metal 99.999%	dil HNO_3	AAS-017	100 mL	AAS-017-5	500 mL
Tin	Sn Metal 99.999%	dil HCl	AAS-018**	100 mL	AAS-018-5**	500 mL
Titanium	Ti Metal 99.999%	dil HCl	AAS-019**	100 mL	AAS-019-5**	500 mL
Vanadium	NH_4VO_3 99.998%	dil HNO_3	AAS-020	100 mL	AAS-020-5	500 mL
Zinc	Zn Metal 99.999%	dil HNO_3	AAS-021	100 mL	AAS-021-5	500 mL
Zirconium	$ZrCl_4$ 99.999%	dil HCl	AAS-031**	100 mL	AAS-031-5**	500 mL

**ships hazardous

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NSI Solutions is ISO 9001 registered and an A2LA accredited PT provider. (Certificate #: 2432.01)

ICP/ICP-MS STANDARDS

ELEMENT	SOURCE	MATRIX	Part No.	Size in mL	Part No.	Size in mL
Aluminum	Al Metal 99.999%	dil HNO_3	TM-001L	100 mL	TM-001L-250	250 mL
Antimony	Sb Metal 99.999%	dil HNO_3/tr HF	TM-002L**	100 mL	TM-002L-250**	250 mL
Arsenic	As Metal 99.999%	dil HNO_3	TM-003L	100 mL	TM-003L-250	250 mL
Barium	$BaCO_3$ 99.999%	dil HNO_3	TM-004L	100 mL	TM-004L-250	250 mL
Beryllium	Be Metal 99.995%	dil HNO_3	TM-005L	100 mL	TM-005L-250	250 mL
Bismuth	Bi Metal	dil HNO_3	TM-067L	100 mL	TM-067L-250	250 mL
Boron	Boric Acid 99.999%	Water	TM-028L	100 mL	TM-028L-250	250 mL
Cadmium	Cd Metal 99.999%	dil HNO_3	TM-006L	100 mL	TM-005L-250	250 mL
Calcium	$CaCO_3$ 99.999%	dil HNO_3	TM-024L	100 mL	TM-024L-250	250 mL
Carbon	$Na_2C_2O_4$	Water	TM-068L	100 mL	TM-068L-250	250 mL
Carbon as TOC	$KHC_8H_4O_4$	Water	TM-069L	100 mL	TM-069L-250	250 mL
Cerium	CeO_2	dil HNO_3	TM-037L	100 mL	TM-037L-250	250 mL
Cesium	$CsNO_3$	dil HNO_3	TM-038L	100 mL	TM-038L-250	250 mL
Chromium	Cr Metal 99.999%	dil HNO_3	TM-007L	100 mL	TM-007L-250	250 mL
Cobalt	Co Metal 99.999%	dil HNO_3	TM-008L	100 mL	TM-008L-250	250 mL
Copper	Cu Metal 99.999%	dil HNO_3	TM-009L	100 mL	TM-009L-250	250 mL
Dysprosium	Dy_2O_3	dil HNO_3	TM-039L	100 mL	TM-039L-250	250 mL
Erbium	Er_2O_3	dil HNO_3	TM-040L	100 mL	TM-040L-250	250 mL
Europium	Eu_2O_3	dil HNO_3	TM-041L	100 mL	TM-041L-250	250 mL
Gadolinium	Gd_2O_3	dil HNO_3	TM-042L	100 mL	TM-042L-250	250 mL
Gallium, Ga	Ga Metal	dil HNO_3	TM-043L	100 mL	TM-043L-250	250 mL
Germanium	Ge Metal	dil HNO_3/tr HF	TM-044L	100 mL	TM-044L-250	250 mL
Gold	Au Metal	dil HCl	TM-070L	100 mL	TM-070L-250	250 mL
Hafnium	HfO_2	dil HNO_3	TM-045L	100 mL	TM-045L-250	250 mL
Holmium	Ho_2O_3	dil HNO_3	TM-046L	100 mL	TM-046L-250	250 mL
Indium	In Metal	dil HCl	TM-071L	100 mL	TM-071L-250	250 mL
Iridium	$IrCl_3$	dil HCl	TM-072L	100 mL	TM-072L-250	250 mL
Iron	Fe 99.999%	dil HNO_3	TM-010L	100 mL	TM-010L-250	250 mL
Lanthanum	La_2O_3	dil HNO_3	TM-047L	100 mL	TM-047L-250	250 mL
Lead	Pb 99.999%	dil HNO_3	TM-011L	100 mL	TM-011L-250	250 mL
Lithium	Li_2CO_3	dil HNO_3	TM-048L	100 mL	TM-048L-250	250 mL
Lutetium	Lu_2O_3	dil HNO_3	TM-049L	100 mL	TM-049L-250	250 mL
Magnesium	Mg Metal 99.999%	dil HNO_3	TM-026L	100 mL	TM-026L-250	250 mL
Manganese	Mn Metal 99.999%	dil HNO_3	TM-012L	100 mL	TM-012L-250	250 mL
Mercury	Hg Metal 99.999%	dil HNO_3	TM-022L	100 mL	TM-022L-250	250 mL
Molybdenum	Mo Metal 99.999%	dil HNO_3	TM-013L	100 mL	TM-013L-250	250 mL
Neodymium	Nd_2O_3	dil HNO_3	TM-050L	100 mL	TM-050L-250	250 mL
Nickel	Ni Metal 99.999%	dil HNO_3	TM-014L	100 mL	TM-014L-250	250 mL
Niobium	Nb Metal	dil HNO_3/tr HF	TM-051L	100 mL	TM-051L-250	250 mL
Palladium	$Pd(NO_3)_2$ 99.999%	dil HNO_3	TM-029L	100 mL	TM-029L-250	250 mL
Phosphorus	$NH_4H_2PO_4$	dil HNO_3	TM-074L	100 mL	TM-074L-250	250 mL

ICP/ICP-MS STANDARDS

ELEMENT	SOURCE	MATRIX	Part No.	Size in mL	Part No.	Size in mL
Platinum	K_2PtCl_6 99.999%	dil HCl	TM-030L**	100 mL	TM-030L-250**	250 mL
Potassium	KNO_3 99.999%	dil HNO_3	TM-025L	100 mL	TM-025L-250	250 mL
Praseodyium	Pr_6O_{11}	dil HNO_3	TM-052L	100 mL	TM-052L-250	250 mL
Rhenium	Re Metal	dil HNO_3	TM-075L	100 mL	TM-075L-250	250 mL
Rhodium	$RhCl_3$	dil HCl	TM-076L*	100 mL	TM-076L-250*	250 mL
Ruthenium	$(NH_4)_2RuCl_6$	dil HCl	TM-077L	100 mL	TM-077L-250	250 mL
Rubidium	$RbNO_3$	dil HNO_3	TM-053L	100 mL	TM-053L-250	250 mL
Samarium	Sm_2O_3	dil HNO_3	TM-055L	100 mL	TM-055L-250	250 mL
Scandium	Sc_2O_3	dil HNO_3	TM-078L	100 mL	TM-078L-250	250 mL
Selenium	Se Metal 99.999%	dil HNO_3	TM-015L	100 mL	TM-015L-250	250 mL
Silicon	SiO_2	dil HNO_3/tr HF	TM-054L	100 mL	TM-054L-250	250 mL
Silver	Ag Metal 99.999%	dil HNO_3	TM-023L	100 mL	TM-023L-250	250 mL
Sodium	$NaNO_3$ 99.995%	dil HNO_3	TM-027L	100 mL	TM-027L-250	250 mL
Strontium	$SrCO_3$ 99.999%	dil HNO_3	TM-016L	100 mL	TM-016L-250	250 mL
Sulfur	Methanesulfonic Acid	Water	TM-056L	100 mL	TM-056L-250	250 mL
Tantalum	Ta Metal	dil HNO_3	TM-057L	100 mL	TM-057L-250	250 mL
Tellurium	Te Metal	dil HNO_3	TM-058L	100 mL	TM-058L-250	250 mL
Terbium	Tb_4O_7	dil HNO_3	TM-079L	100 mL	TM-079L-250	250 mL
Thallium	Tl Metal 99.999%	dil HNO_3	TM-017L	100 mL	TM-017L-250	250 mL
Thorium	$Th(NO_3)_4$	dil HNO_3	TM-059L	100 mL	TM-059L-250	250 mL
Thulium	Tm_2O_3	dil HNO_3	TM-060L	100 mL	TM-060L-250	250 mL
Tin	Sn Metal 99.999%	dil HCl	TM-018L**	100 mL	TM-018L-250**	250 mL
Titanium	Ti Metal 99.999%	dil HCl	TM-019L**	100 mL	TM-019L-250**	250 mL
Tungsten	W Metal	dil HNO_3/tr HF	TM-061L	100 mL	TM-061L-250	250 mL
Uranium	$UO_2(NO_3)_2$	dil HNO_3	TM-062L	100 mL	TM-062L-250	250 mL
Vanadium	NH_4VO_3 99.999%	dil HNO_3	TM-020L	100 mL	TM-020L-250	250 mL
Ytterbium	Yb_2O_3	dil HNO_3	TM-063L	100 mL	TM-063L-250	250 mL
Yttrium	Y_2O_3	dil HNO_3	TM-080L	100 mL	TM-080L-250	250 mL
Zinc	Zn Metal 99.999%	dil HNO_3	TM-021L	100 mL	TM-021L-250	250 mL
Zirconium	$ZrCl_4$,99.999%	dil HCl	TM-031L**	100 mL	TM-031L-250**	250 mL

**ships hazardous

All of these products are supplied with certificates of traceability listing certified concentrations and acceptance limits. NSI Solutions is ISO 9001 registered and an A2LA accredited PT provider. (Certificate #: 2432.01)

How To Do Business With NSI

ORDERING INFORMATION

Phone:	(800) 234-7837 (919) 957-9672	Hours: 8:00 am - 5:00 pm Eastern Time, Monday - Friday
To Order:		Please provide Account No., Purchase Order No., Catalog No., and Item Description and Quantity. NSI accepts Mastercard, Visa and American Express.
Fax:	(919) 957-7562	24 hours a day
Mail:	NSI Solutions, Inc. 7517 Precision Drive, Suite 101 Raleigh, NC 27617	
E-Mail:	nsi@nsi-es.com	Please include all relevant ordering information.
On-line:	www.nsi-es.com	
Technical Service:	(919) 957-9672 or (800) 234-7837	Hours: 8:00 am - 5:00 pm Eastern Time Monday - Friday

Shipping: Orders for stock items received before 4:00 pm EST can be shipped for next day delivery. Emergency requests will be accommodated if possible. Orders are shipped via UPS or Federal Express. Freight charges are prepaid and added to your invoice.

UNCONDITIONAL GUARANTEE

If you are not satisfied with the performance of any NSI product, we will resolve the problem within 24 hours of your call by immediately replacing in-stock products or refunding the full purchase price.

Conditions of Sale:

Net 30 days - FOB Raleigh, NC. Any taxes, duties, fees or other charges imposed by any governmental body are to be paid by the buyer. Prices subject to change without notice.

Limitation of Liability:

NSI Solutions makes no warranty, express or implied, with respect to products. NSI Solutions' maximum liability for any reason will be replacement of the product or refund of the purchase price. NSI Solutions will not be liable for any loss or damage resulting from the use of its products. Environmental Reference Materials purchased from NSI are intended for laboratory use only by qualified, trained personnel.

ORDER FORM

Order Form

To: NSI Solutions, Inc.
7517 Precision Drive • Suite 101
Raleigh, NC 27617
(800) 234-7837

Fax: (919) 957-7562

On-line: www.nsi-es.com

From: Acct. # _____

Ship to: Company _____
Attn: _____
Address _____
City _____ State _____ Zip _____
Phone _____ Fax _____

Photocopy this form for future use

Bill to: Company _____
Attn: _____
Address _____
City _____ State _____ Zip _____
Phone _____ Fax _____

FedEx: Priority Overnight ____ Standard Overnight ____ Economy ____

UPS: Red ____ Blue ____ Third Day ____ Ground ____

Catalog #	Description	Unit Price	Quantity	Extended Price (Price x Qty.)
			Subtotal	
			NC Sales Tax	
			Total	

*Freight charges will be prepaid and added to your total at the time of order.

3. Complete Payment Information

PO#: **OR**

Charge My: ☐ Visa ☐Master Card ☐ AmEx

Acct. #: _____ Exp. Date: _____ Security Code _____
3 DIGITS ON BACK OF CARD

Name of Card Holder: _____ Signature: _____

4. Fax this form to NSI @ 919-957-7562.
Questions? Call NSI at 1-800-234-7837.
7517 Precision Drive, Suite 101, Raleigh, NC 27617

TEAR ALONG PERFORATION

Registration #: A8614
ISO 9001:2000

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