



# VERICHEM<sup>®</sup>

## LABORATORIES INC.

### 2019-2020 PRODUCT CATALOG

## *Reference Materials*

*for clinical chemistry quality control*

**LEADING DEVELOPMENT SINCE 1988**

- ▼ METHOD EVALUATION
- ▼ CALIBRATION VERIFICATION
- ▼ TROUBLESHOOTING
- ▼ CALIBRATION
- ▼ RECOVERY STUDIES
- ▼ ROUTINE QUALITY CONTROL
- ▼ FREE DATA REDUCTION



*Verified and lot certified using available standard reference materials from the National Institute of Standards and Technology*

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## MATRIX PLUS™ CHEMISTRY REFERENCE KIT

- liquid standards with bovine protein
- order 9240 Serum ISE Standard Kit for electrolyte ISE
- remarkable optical clarity, 21 month open stability
- suitable for most methods - visible and UV, kinetic or endpoint
- known NIST verified targets for major wet chemistry analyzers
- constant protein content and pH across the concentration levels
- no glycols, azides or surfactants
- for calibration or calibration verification

List Number 9500 (5 X 15 mL) Price \$154.00

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
GLUCOSE	mg/dL	25	200	375	550	725
UREA NITROGEN	mg/dL	5.0	37.5	70.0	102.5	135.0
CREATININE	mg/dL	0.2	6.2	12.2	18.2	24.2
CALCIUM	mg/dL	5.0	7.5	10.0	12.5	15.0
PHOSPHORUS	mg/dL	1.0	3.5	6.0	8.5	11.0
MAGNESIUM	mg/dL	0.80	2.30	3.80	5.30	6.80
MAGNESIUM	mEq/L	0.66	1.90	3.13	4.37	5.60
TRIGLYCERIDE*	mg/dL	10	245	480	715	950

\*Triglyceride values are obtained by gravimetric weight of glycerol expressed as triolein.

## MATRIX PLUS™ CHEMISTRY REFERENCE, LEVEL F

- identical matrix as Verichem 9500 MATRIX PLUS™ Chemistry Reference Kit for optimum linearity
- protein based, ready-to-use liquid
- no glycols, azides or surfactants
- known NIST verified targets for major wet chemistry analyzers
- for calibration or calibration verification

List Number 9506 (1 X 15 mL) Price \$34.00

ANALYTE	UNITS	LEVEL F
GLUCOSE	mg/dL	1000
UREA NITROGEN	mg/dL	150
CREATININE	mg/dL	30.0
CALCIUM	mg/dL	20.0
PHOSPHORUS	mg/dL	20.0
MAGNESIUM	mg/dL	9.72
TRIGLYCERIDE*	mg/dL	1250

\*Triglyceride values are obtained by gravimetric weight of glycerol expressed as triolein.

This product is not sold separately and must be purchased with 9500 Matrix Plus™ Chemistry Reference Kit.

## SERUM ISE STANDARD KIT

- protein-based, liquid gravimetric standards
- intended for calibration verification or calibration
- for direct ISE, diluted / indirect ISE and cesium flame
- glycol and surfactant free for maximum electrode protection
- extended range for high volume analyzers
- NIST verified and lot certified

List Number 9240 (5 X 15 mL) Price \$137.00

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
SODIUM	mmol/L	50.0	87.5	125.0	162.5	200.0
POTASSIUM	mmol/L	1.00	3.25	5.50	7.75	10.00
CHLORIDE	mmol/L	50.0	87.5	125.0	162.5	200.0
LITHIUM	mmol/L	0.20	1.30	2.40	3.50	4.60

See full description on page 8 of this catalog.

## ELECTROLYTE STANDARD KIT

- protein-based, liquid gravimetric standards
- intended for calibration verification or calibration
- suitable for most direct ISE, diluted ISE and cesium flame
- glycol and surfactant free for maximum electrode protection
- suitable for lithium direct ISE
- specifically designed for benchtop direct ISE

List Number 9200 (5 X 15 mL) Price \$170.00

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
SODIUM	mmol/L	100	118	136	154	172
POTASSIUM	mmol/L	1.75	4.50	7.25	10.00	12.75
CHLORIDE	mmol/L	60.0	88.5	117.0	145.5	174.0
LITHIUM	mmol/L	0.50	1.75	3.00	4.25	5.50
IONIZED CALCIUM	mmol/L*	0.50	1.50	2.50	3.50	4.50

\*Ionized Calcium values shown are approximate

## ORDERING INFORMATION

by Mail: Verichem Laboratories, Inc.  
90 Narragansett Avenue  
Providence, RI 02907

by Fax: 401-467-1540 by Email: customerservice@verichemlabs.com

Minimum order is \$50.00. All orders shipped FedEx Air Service, F.O.B. Providence. Shipping costs are prepaid and added to each invoice. Handling charge of \$5.00 per order. Terms are net 30 days from date of invoice. No other items or conditions of sale binding unless authorized by a Verichem representative. Prices effective March 1, 2019 and subject to change without notice.

**VERICHEM**®  
LABORATORIES, INC.



## ENZYME ER™ VERIFIER KIT

List Number 9410

(6 X 5 mL)

Price \$254.00

- protein-based, liquid, ready-to-use
- intended for calibration verification of serum kinetic assays
- known linear relation stated for all wet chemistry analyzers
- stable 14 months from date of manufacture
- specifically designed for extended range systems
- assay values included for AU, Roche Cobas and Abbott Architect Chemistry Systems
- normal range point for all enzymes

ANALYTE	UNITS*	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E	LEVEL F
ASPARTATE AMINOTRANSFERASE (AST/GOT)	U/L,37°C	4	23	191	377	563	750
ALANINE AMINOTRANSFERASE (ALT/GPT)	U/L,37°C	3	15	127	252	376	500
ALKALINE PHOSPHATASE (ALP/AP)	U/L,37°C	8	45	381	755	1127	1500
LACTATE DEHYDROGENASE (LD/LDH)	U/L,37°C	6	36	305	604	901	1200
CREATINE PHOSPHOKINASE (CK/CPK)	U/L,37°C	10	60	508	1006	1502	2000
GAMMA GLUTAMYLTRANSFERASE (GGT/GGPT)	U/L,37°C	6	36	305	604	901	1200
ALPHA-AMYLASE (AMS/AMY)	U/L,37°C	10	60	508	1006	1502	2000
LIPASE (LP/LIP)	U/L,37°C	18	32	164	309	455	600
CHOLINESTERASE (CHE)	KU/L,37°C	0.1	0.5	3.8	7.5	11.3	15.0

\*Typical recovery for AU Chemistry Systems; values shown are approximate.

## ENZYME ER™ VERIFIER, LEVEL G

List Number 9417

(1 X 5 mL)

Price \$16.00

- protein-based, liquid, ready-to-use, 14 month stability
- intended to extend the range for calibration verification of AU Chemistry AST only
- assay value included for all AU Systems

ANALYTE	UNITS*	LEVEL G
ASPARTATE AMINOTRANSFERASE (AST/GOT)	U/L,37°C	1000

\*Typical recovery for AU Chemistry Systems; values shown are approximate.

## URINE CHEMISTRY STANDARD KIT

List Number 9000

(5 X 15 mL)

Price \$216.00

- intended for calibration verification or calibration
- known NIST verified gravimetric concentrations
- liquid, ready-to-use
- synthetic matrix: free of surfactants, glycols, azide and other interfering substances
- stable 17 months from date of manufacture
- treat as patient specimen with any wet chemistry urine test

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
SODIUM	mmol/L	10	110	210	310	410
POTASSIUM	mmol/L	2	52	102	152	202
CHLORIDE	mmol/L	20	115	210	305	400
UREA NITROGEN	mg/dL	20	365	710	1055	1400
CREATININE	mg/dL	5	80	155	230	305
CALCIUM	mg/dL	1.0	11.0	21.0	31.0	41.0
PHOSPHORUS	mg/dL	10	60	110	160	210
MAGNESIUM	mg/dL	1.0	3.5	6.0	8.5	11.0

## URINE URIC ACID STANDARD KIT

List Number 9020

(5 X 5 mL)

Price \$128.00

- intended for calibration verification or calibration
- known, gravimetric concentrations
- frozen liquid, ready-to-use
- synthetic matrix: free of surfactants, glycols, azide and other interfering substances
- treat as patient specimen with any wet chemistry urine test

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
URIC ACID	mg/dL	1	26	51	76	101

See full description on page 10 of this catalog.

## MICROPROTEIN STANDARD KIT

List Number 9480

(5 X 15 mL)

Price \$157.00

- intended for calibration or calibration verification
- liquid, ready-to-use standards
- human protein components for optimum reactivity
- extremely stable formulation with 24 month shelf life at 2° to 8°C
- certified gravimetric concentrations with exceptional lot-to-lot duplication
- suitable for any turbidimetric or colorimetric method
- azide free

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
TOTAL PROTEIN	mg/dL	10	60	110	160	210
HUMAN ALBUMIN	mg/dL	7	42	77	112	147



### MATRIX PLUS™ CHOLESTEROL REFERENCE KIT

List Number 9550

(5 X 15 mL)

Price \$195.00

- liquid standards with bovine protein
- remarkable optical clarity
- contains esterified and free cholesterol from bovine serum
- known concentrations verified against available NIST Standard Reference Material
- for calibration or calibration verification
- constant protein content, pH and ionic strength across concentration levels
- prepared without surfactants, glycol or azide
- stable 21 months from date of manufacture

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
CHOLESTEROL	mg/dL	40	155	270	385	500
URIC ACID	mg/dL	2	7	12	17	22

### MATRIX PLUS™ CHOLESTEROL, LEVEL F

List Number 9556

(1 X 15 mL)

Price \$40.00

- identical matrix as Verichem 9550 MATRIX PLUS™ Cholesterol Reference Kit for optimum linearity
- protein based, ready-to-use liquid
- no glycols, azides or surfactants
- known concentrations verified against available NIST Standard Reference Material
- stable 21 months from date of manufacture

ANALYTE	UNITS	LEVEL F
CHOLESTEROL	mg/dL	750
URIC ACID	mg/dL	30

This product is not sold separately and must be ordered with 9550 Matrix Plus™ Cholesterol Reference Kit.

### TOTAL PROTEIN / ALBUMIN STANDARD KIT

List Number 9460

(5 X 15 mL)

Price \$157.00

- for calibration verification or calibration
- prepared with human serum albumin
- accurate, liquid standards containing purified proteins in saline
- stable 24 months from date of manufacture
- known concentrations verified against available NIST Standard Reference Material

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
TOTAL PROTEIN	g/dL	1.5	4.0	6.5	9.0	11.5
HUMAN ALBUMIN	g/dL	1.5	2.5	3.5	4.5	5.5

### TOTAL PROTEIN / ALBUMIN STANDARD, LEVEL F

List Number 9466

(1 X 15 mL)

Price \$32.00

- identical matrix as Verichem 9460 Total Protein/Albumin Standard Kit for optimum linearity
- accurate, ready-to-use liquid standard
- prepared from highly purified proteins
- known concentrations verified against available NIST Standard Reference Material

ANALYTE	UNITS	LEVEL F
TOTAL PROTEIN	g/dL	14.0
HUMAN ALBUMIN	g/dL	6.5

This product is not sold separately and must be ordered with 9460 Total Protein/Albumin Standard Kit.

### HDL CHOLESTEROL VERIFIER KIT

List Number 9560

(6 X 5 mL)

Price \$318.00

- intended for calibration verification of serum HDL cholesterol and LDL cholesterol
- liquid, ready-to-use, no manual dilution required
- treat as patient specimen with any indirect or direct wet method
- ultra-pure, protein matrix eliminates ambiguity and imprecision
- linear relation provided
- assigned values included for AU Chemistry Systems as well as all direct methods

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E	LEVEL F
HDL CHOLESTEROL	mg/dL*	10	42	73	105	131	200
LDL CHOLESTEROL	mg/dL*	20	83	147	210	263	400

\*Typical recovery, values shown are approximate.

See full description on page 11 of this catalog.



## BILIRUBIN STANDARD KIT

- protein-based, optically clear, liquid standards
- intended specifically for calibration verification
- known linear relation stated in product insert
- stable 5 days after opening when refrigerated
- kit includes two, five-level sets
- no glycols, azides or surfactants
- concentrations verified using pure crystalline bilirubin and Dumas reference method

List Number 9450 (10 X 5 mL) Price \$150.00

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
TOTAL BILIRUBIN	mg/dL	0.5	5.5	10.5	15.5	20.5
DIRECT BILIRUBIN	mg/dL*	0.5	5.5	10.5	15.5	20.5

\* direct bilirubin values may vary with methodology and conditions of assay

Technical note: Reichert Technologies Bilirubinometer requires 9456 Tru-Zero™ Bilirubin Standard as the lowest level standard.

## BILIRUBIN STANDARD, LEVEL F

- identical matrix as Verichem 9450 Bilirubin Standard Kit for optimum linearity
- protein based, ready-to-use liquid
- no glycols, azides or surfactants
- concentrations verified using pure crystalline bilirubin and Dumas reference method
- stable 5 days after opening when refrigerated

List Number 9436 (2 X 5 mL) Price \$34.00

ANALYTE	UNITS	LEVEL F
TOTAL BILIRUBIN	mg/dL	30.0

This product is not sold separately and must be ordered with 9450 Bilirubin Standard Kit.

## TRU-ZERO™ BILIRUBIN STANDARD

- identical matrix as Verichem 9450 Bilirubin Standard Kit for optimum linearity
- protein based, ready-to-use liquid
- no glycols, azides or surfactants
- no special procedures or diluents required
- stable 5 days after opening when refrigerated

List Number 9456 (2 X 5 mL) Price \$26.00

ANALYTE	UNITS	CONCENTRATION
TOTAL BILIRUBIN	mg/dL	0.0
DIRECT BILIRUBIN	mg/dL	0.0

## BR2 BILIRUBIN CALIBRATOR

- specifically designed for calibration of Advanced Instruments Model BR2 Bilirubin Stat-Analyzer
- protein based, ready-to-use liquid
- no glycols, azides or surfactants
- no special procedures or diluents required
- stable 5 days after opening when refrigerated

List Number 9459 (2 X 5 mL) Price \$38.00

ANALYTE	UNITS	CONCENTRATION
TOTAL BILIRUBIN	mg/dL	20.0

**FOR ADVANCED BR2 BILIRUBIN STAT-ANALYZER ONLY**



*“Verichem Laboratories is dedicated to all clinical chemists whose goal is to determine the absolute accuracy of their diagnostic test system.*

*Our ultimate goal is to provide clinical chemists with cost effective, ready-to-use, protein-based reference materials that are also serum-like, highly accurate and stable. For calibration verification, Verichem standards are used to determine a clinical system’s bias to the true or known value, independent of consensus.”*

Anthony J. DiMonte  
President  
Verichem Laboratories, Inc.



## CARBON DIOXIDE STANDARD KIT

- aqueous, ready-to-use standards
- intended for calibration verification or calibration
- suitable for most serum ISE or enzymatic methods
- prepared from reagent grade source materials

List Number 9210 (5 X 15 mL) Price \$68.00

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
CARBON DIOXIDE	mmol/L	5	10	20	30	40

## CARBON DIOXIDE STANDARD, LEVEL F

- identical non-protein matrix as Verichem 9210 Carbon Dioxide Standard Kit for optimum linearity
- ready-to-use liquid
- prepared from reagent grade standard source materials
- suitable for most serum ISE or enzymatic methods

List Number 9216 (1 X 15 mL) Price \$12.00

ANALYTE	UNITS	LEVEL F
CARBON DIOXIDE	mmol/L	50

This product is not sold separately and must be ordered with 9210 Carbon Dioxide Standard Kit.

## AMMONIA / IRON STANDARD KIT

- intended for calibration or calibration verification
- pH adjusted, non-protein matrix supports these critical trace analytes
- stable 24 months from date of manufacture at 2° to 8°C
- contains only reagent grade source materials
- suitable for most enzymatic ammonia and iron color methods

List Number 9040 (5 X 15 mL) Price \$117.00

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
AMMONIA	µmol/L	6	235	464	693	922
AMMONIA	mcg/dL	10	400	790	1180	1570
TOTAL IRON	mcg/dL	10	130	250	370	490

## AMMONIA / IRON STANDARD, LEVEL F

- identical non-protein matrix as Verichem 9040 Ammonia/Iron Standard Kit for optimum linearity
- ready-to-use liquid
- prepared from reagent grade standard source materials
- known concentrations verified against available NIST Standard Reference Material

List Number 9046 (1 X 15 mL) Price \$16.00

ANALYTE	UNITS	LEVEL F
AMMONIA	µmol/L	1175
AMMONIA	mcg/dL	2000
TOTAL IRON	mcg/dL	1000

This product is not sold separately and must be ordered with 9040 Ammonia / Iron Standard Kit.

## ETHANOL STANDARD KIT

- protein-based, liquid standards
- intended for ethanol calibration verification or calibration
- suitable for most enzymatic methods
- glycol and azide free
- contains known linear relation for acetaminophen, lactate and salicylate
- 18 month shelf life at 2° to 8°C

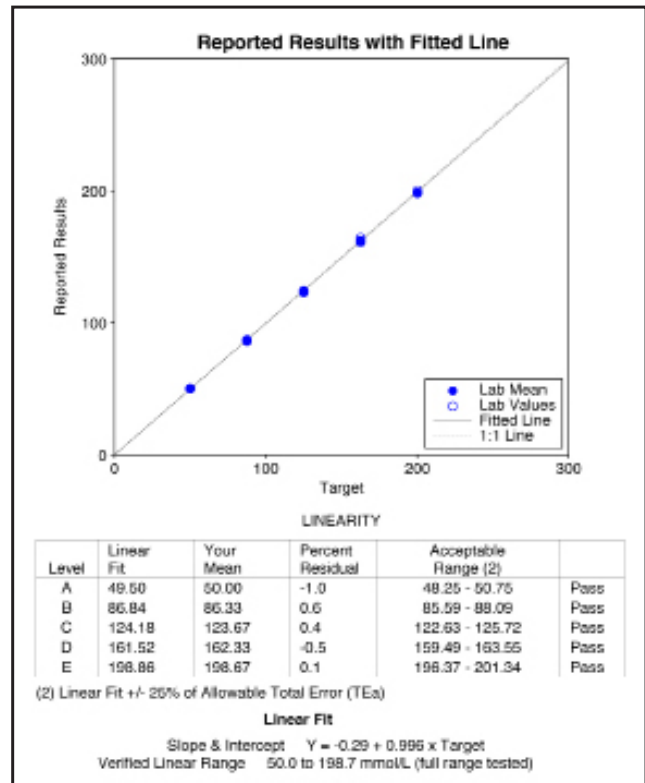
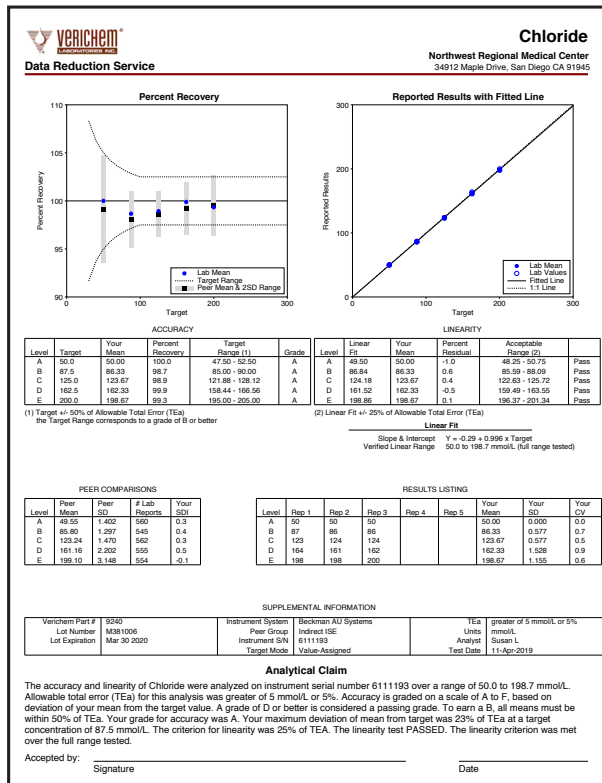
List Number 9670 (6 X 5 mL) Price \$208.00

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E	LEVEL F
ETHANOL	mg/dL	12	77	96	312	482	600
LINEAR RELATION: acetaminophen, lactate, salicylate	percent dilution	2	13	16	52	80	100

See full description on page 9 of this catalog.



Verichem has accomplished unprecedented technical achievements and continues to advance in linking definitive method value assignment with practicality. Clinical scientists worldwide have recognized the importance of Verichem premium quality control materials in routine monitoring of their chemistry systems.



## LOG IN • ENTER RESULTS • SUBMIT • PRINT

- ▼ No software to download.
- ▼ Complete all-in-one program to satisfy CLIA and CAP requirements.
- ▼ Calibration Verification Experiments include:
  1. Accuracy
  2. Linearity
  3. Calibration Verification
  4. Reportable Range
- ▼ User-friendly and professional reports are ready to sign and file.
- ▼ Accuracy and Linearity Graph included on each report.
- ▼ Online peer group data allows instant comparison of your results with those of other labs. Abbott, Beckman and Roche lot-specific targets now available for enzyme tests.
- ▼ Target values are already loaded online. Just enter instrument results and get your reports printed instantly.
- ▼ Register with a secure password for access to the online program.
- ▼ Expert support is just a phone call away to answer questions about your reports or for help troubleshooting.

## EXTENSIVE DATABASE TO SUPPORT TROUBLESHOOTING PERFORMANCE ISSUES

## FREE INSTANT CAL VER REPORTS

Register online at [verichem-data-reduction.net](http://verichem-data-reduction.net)

Questions? Contact us  
 Verichem Laboratories Customer Service  
 phone: 800-552-5859 email: [customerservice@verichemlabs.com](mailto:customerservice@verichemlabs.com)





## NEW PRODUCT RELEASE

**PRODUCT LIST NUMBER:** 9240

**PRODUCT NAME:** SERUM ISE STANDARD KIT

**INTENDED USE:** The Verichem Serum ISE Standard Kit is an aqueous in vitro diagnostic product. It is intended for calibration or calibration verification of clinical chemistry test systems.

**KIT SIZE:** Five concentration levels, fifteen milliliters each level.

**PRICE:** \$137.00

**SHELF LIFE:** 18 months

### DESCRIPTION

Verichem developed the Serum ISE Standard Kit to meet the range and matrix requirements of large volume analyzers. These standard reference materials may be treated as patient specimens with any wet chemistry ISE or color method.

Verichem's Serum ISE Standard kit is an advanced universal product design for critical evaluation and verification of serum electrolytes, including therapeutic lithium. The matrix is synthetic at pH 7.4 and contains no serum for a more stable and reproducible base. As with all Verichem products, the exclusion of serum in this formulation allows us to provide absolute known concentrations. This ready-to-use product is free of surfactants, glycols, azide and other interfering substances.

Target concentrations are equidistant and meet CLIA requirements for verification material with known values for the determination of clinical test system accuracy, sensitivity, linearity and reportable range. This set is the perfect complement to Verichem's impressive menu of known concentrations having no relation to consensus or assay. Each of these twenty five absolute concentrations is verified using popular clinical methods and available Standard Reference Materials from the National Institute of Standards and Technology (NIST). A lot-specific Certificate of Analysis is included in each kit.

The Serum ISE Standard Kit contains one five-level set with fifteen milliliters each level, product insert, Certificate of Analysis and organizer tray. The fluids are packaged in translucent polyethylene dropper vials and stored at refrigerated temperatures (2° to 8°C). The vials are multiple dose and may be used numerous times until the expiration date on the kit.

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
SODIUM	mmol/L	50.0	87.5	125.0	162.5	200.0
POTASSIUM	mmol/L	1.00	3.25	5.50	7.75	10.00
CHLORIDE	mmol/L	50.0	87.5	125.0	162.5	200.0
LITHIUM	mmol/L	0.20	1.30	2.40	3.50	4.60

This innovative new product complements Verichem's complete line of fluids and software for calibration verification.

### ORDERING INFORMATION:

Fax to (401) 467-1540 or email your order to: [customerservice@verichemlabs.com](mailto:customerservice@verichemlabs.com)

# VERICHEM®

LABORATORIES, INC.

90 Narragansett Avenue, Providence, RI, 02907



**PRODUCT LIST NUMBER:** 9670

**PRODUCT NAME:** ETHANOL STANDARD KIT

**INTENDED USE:** The Verichem Ethanol Standard Kit is a protein based, in vitro diagnostic product. It is intended for calibration or calibration verification of serum ethanol test systems. This product also contains lactate, salicylate and acetaminophen in a known linear relation.

**KIT SIZE:** Six concentration levels, five milliliters each level.

**PRICE:** \$208.00

**SHELF LIFE:** 18 months

**DESCRIPTION**

The Ethanol Standard Kit is the newest addition to Verichem’s menu. This accurate, liquid reference material spans the entire clinical range for most serum ethanol test systems. The protein based standards may be treated as patient specimens with any wet chemistry methods.

Verichem’s Ethanol Standard kit is unique in design, incorporating the serum-like reactivity of a bovine protein base with the volumetric accuracy of an aqueous matrix. The matrix is bio-synthetic, containing no serum for maximum stability and lot-to-lot duplication. The exclusion of whole serum in this formulation allows Verichem to manufacture its Ethanol Standards as a standard reference material with known values. Concentrations are assigned by volumetric procedure and indicate weight per volume composition using absolute ethanol source material of known purity. This ready-to-use product is also free of surfactants, glycols, azide and other interfering substances.

Verichem’s important design creates critical serum ethanol set points at or near decision cut-off concentrations of 0.01, 0.08 and 0.10 percent. The combination of unique matrix formulation and set point design are the key classic features for the absolute determination of clinical test system accuracy, sensitivity, linearity and reportable range. This set is the perfect complement to Verichem’s impressive menu of known concentrations having no relation to consensus or assay. Each of the six absolute concentrations is verified using popular clinical methods and available Standard Reference Materials from the National Institute of Standards and Technology (NIST). A lot-specific Certificate of Analysis is included in each kit.

In addition to the ethanol component, Verichem’s Ethanol Standard Kit contains known linear relation for lactate, salicylate and acetaminophen. Linear dilution factors were obtained by volumetric dilution of two stock standards. The resultant dilutions possess constant pH and protein content for maximum linearity performance. The dilution ratios, reflecting the relative levels of the three additional components, are stated in the product insert and may be used to determine sensitivity, linearity and reportable range for these assays.

The Ethanol Standard Kit contains one six-level set with five milliliters each level, product insert, Certificate of Analysis and organizer tray. The fluids are packaged in translucent polyethylene dropper vials. Shelf life is 18 months from the date of manufacture at refrigerated temperatures (2° to 8°C)

<b>ANALYTE</b>	<b>UNITS</b>	<b>LEVEL A</b>	<b>LEVEL B</b>	<b>LEVEL C</b>	<b>LEVEL D</b>	<b>LEVEL E</b>	<b>LEVEL F</b>
<b>ETHANOL</b>	mg/dL	12	77	96	312	482	600
<b>LINEAR RELATION:</b> (acetaminophen, lactate, salicylate)	percent dilution	2	13	16	52	80	100

**ORDERING INFORMATION:**

Fax to (401) 467-1540 or email your order to: [customerservice@verichemlabs.com](mailto:customerservice@verichemlabs.com)

This innovative product complements Verichem’s complete line of fluids and software for calibration verification.



**PRODUCT LIST NUMBER:** 9020

**PRODUCT NAME:** URINE URIC ACID STANDARD KIT

**INTENDED USE:** The Verichem Urine Uric Acid Standard Kit is an aqueous, in vitro diagnostic product. It is intended for calibration or calibration verification of urine test systems.

**KIT SIZE:** Five concentration levels, five milliliters each level.

**PRICE:** \$128.00

**SHELF LIFE:** 19 months

**DESCRIPTION**

The Urine Uric Acid Standard Kit is another new addition to Verichem’s menu. The product is the first absolute, liquid reference material for urine uric acid and spans the entire clinical range for urine tests. The aqueous, extended range standards may be treated as patient specimens with any wet chemistry system.

This unique new product includes a bio-synthetic matrix with urine-like reactivity. This product is a true, primary standard and meets CLIA requirements for calibration verification. Concentrations are assigned by gravimetric procedure and indicate weight per volume composition using uric acid source material of known purity. The formulation offers maximum stability and undetectable lot-to-lot variation. These uric acid standards are also free of surfactants, glycols, azide and other interfering substances.

The matrix formulation and set point design are the key classic features for determination of clinical test system accuracy, sensitivity, linearity and reportable range. Each of the five standard concentrations is verified using popular clinical methods and available Standard Reference Materials from the National Institute of Standards and Technology (NIST). A lot-specific Certificate of Analysis is included in each kit.

The Urine Uric Acid Standard Kit contains one, five-level set with five milliliters each level, product insert, Certificate of Analysis and organizer tray. The fluids are packaged in multiple dose, polyethylene dropper vials. Storage is frozen at -15 to -25°C and shipped on dry ice via next day air. The formulation is robust and can tolerate up to 10 freeze-thaw cycles without affecting accuracy or performance. Shelf life is currently 19 months from the date of manufacture and will be extended for future lots.

<b>ANALYTE</b>	<b>UNITS</b>	<b>LEVEL A</b>	<b>LEVEL B</b>	<b>LEVEL C</b>	<b>LEVEL D</b>	<b>LEVEL E</b>
<b>URIC ACID</b>	mg/dL	1	26	51	76	101

**ORDERING INFORMATION:**

Fax to (401) 467-1540 or email your order to: [customerservice@verichemlabs.com](mailto:customerservice@verichemlabs.com)

This innovative product complements Verichem’s complete line of fluids and software for calibration verification.

**VERICHEM**<sup>®</sup>

**LABORATORIES, INC.**

90 Narragansett Avenue, Providence, RI, 02907



**PRODUCT LIST NUMBER:** 9560

**PRODUCT NAME:** HDL CHOLESTEROL VERIFIER KIT

**INTENDED USE:** This liquid product is intended for calibration verification of serum HDL cholesterol and LDL cholesterol test systems.

**KIT SIZE:** Six concentration levels, five milliliters each level

**PRICE:** \$318.00

**SHELF LIFE:** 14 months

**DESCRIPTION**

Verichem HDL Cholesterol Verifier kit contains high density and low density lipoprotein cholesterol from human serum in a liquid stable format. Volumetric dilution of highest and lowest concentrations provides a known linear relation among this six level set which is intended for calibration verification of most HDL and LDL wet methods.

The serum-like matrix contains a critical blend of purified human serum albumin, human serum globulin and bovine gamma globulin in saline. Protein balance, pH and ion content is constant across all six levels for optimum linearity even with the most sensitive methods. This ready-to-use product is free of surfactants, glycols and azide.

The kit challenges linearity claims for most direct or indirect HDL and LDL cholesterol test systems. Value Assignment Sheet provides expected concentration recovery for all wet chemistry, direct reacting methods.

Verichem's breakthrough in lipoprotein purification and stabilization is now setting a higher standard for cardiac risk assessment. The HDL Cholesterol Verifier Kit will meet the demands of clinical chemists searching for a convenient, stable product for simultaneous evaluation of these important analytes.

The set point design and matrix formulation represent the cutting edge in lipoprotein reference material. Free of interfering substances, the matrix allows excellent performance with selective precipitation assays. As with all Verichem reference materials, the use of highly purified source components eliminates matrix variations common with serum based products. These inherent properties combine with Verichem's stringent manufacturing tolerances to produce a high quality verifier material with predictable recovery from lot to lot.

The HDL Cholesterol Verifier Kit contains one six-level set with five milliliters each level, product insert, Value Assignment Sheet and organizer tray. The fluids are packaged in translucent polyethylene dropper vials. Shelf life is fourteen months from the date of manufacture at freezer temperatures (-15° to -25°C).

<b>ANALYTE</b>	<b>UNITS</b>	<b>LIST NO. 9561 LEVEL A</b>	<b>LIST NO. 9562 LEVEL B</b>	<b>LIST NO. 9563 LEVEL C</b>	<b>LIST NO. 9564 LEVEL D</b>	<b>LIST NO. 9565 LEVEL E</b>	<b>LIST NO. 9566 LEVEL F</b>
<b>HDL CHOLESTEROL</b>	mg/dL*	10	42	73	105	131	200
<b>LDL CHOLESTEROL</b>	mg/dL*	20	83	147	210	263	400

\*Typical recovery, values shown are approximate.

This innovative product complements Verichem's complete line of fluids and software for calibration verification.

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## VERICHEM PRODUCTS FOR YOUR ANALYZER (2020)

Abbott Diagnostics:	ARCHITECT (all models)	All multi-level products compatible, Level (F) optional
	ALINITY (all models)	All multi-level products compatible, Level (F) optional
Beckman Coulter:	AU SYSTEMS (all models)	All multi-level products compatible, Level (F) optional
	DxC 700 AU	All multi-level products compatible, Level (F) optional
	UNICEL DxC (all models)	All multi-level products compatible, Level (F) optional
Roche Diagnostics:	AVL 9180 / 9181	9240 Electrolyte Standard Kit only
	COBAS C (all models)	All multi-level products compatible, Level (F) optional
	COBAS INTEGRA (all models)	All multi-level products compatible, Level (F) optional
Siemens Healthcare:	DIMENSION (all models)	All multi-level products compatible, Level (F) optional
	ATELLICA (all models)	All multi-level products compatible, Level (F) optional
	ADVIA (all models)	All multi-level products compatible, Level (F) optional
Advanced Instruments:	BR2 BILIRUBIN STAT	9450 Bilirubin, 9436 Bilirubin, Level F and 9459 BR2 Bilirubin
		9456 Tru-Zero Bilirubin
Alfa Wassermann:	ACE Alera	All multi-level products compatible, Level (F) optional
EKF Diagnostics (Stanbio):	Altair / Excel	All multi-level products compatible, Level (F) optional
Horiba Medical:	PENTRA (all models)	All multi-level products compatible, Level (F) optional
		9240 Serum ISE Standard Kit Required
Instrumentation Labs:	GEM PREMIER (all models)	9500 MP Chemistry Reference and 9200 Electrolyte Kits
		9670 Ethanol and 9210 Carbon Dioxide Standard Kits
	GEM OPL & PCL PLUS	9500 MP Chemistry Reference and 9200 Electrolyte Kits
		9670 Ethanol and 9210 Carbon Dioxide Standard Kits
Ortho Clinical:	VITROS	9200 Electrolyte Standard Kit only
Medica Corporation:	EasyLyte	9240 Electrolyte Standard Kit only
	EasyRA	All multi-level products compatible, 9240 Electrolyte Required Level (F) optional

February 2020



1988

**•9200 Electrolyte Standard Kit**

Pioneered the first 5-level liquid protein based gravimetric electrolyte standard.

1988

**•9450 Bilirubin Standard Kit**

Introduced groundbreaking 5-level liquid standard set for bilirubin calibration verification without interfering glycol or surfactants.

1989

**•9460 Total Protein / Albumin Standard Kit**

First to market with gravimetrically prepared total protein / albumin multi-level set containing total protein and 100% human albumin in liquid format.

1991

**•9500 Matrix Plus Chemistry Reference Kit**

Formulated first liquid protein based chemistry reference materials with gravimetric target values and 21 month refrigerated stability.

1991

**•9550 Matrix Plus Cholesterol Reference Kit**

Developed unprecedented liquid protein based total cholesterol reference material validated using the National Reference Method.

1998

**•9480 Microprotein Standard Kit**

Released innovative microprotein multi-level set containing 100% human source material with gravimetric concentrations for microalbumin and micro-total protein.

2002

**•9000 Urine Chemistry Standard Kit**

Completed formulation and marketed original liquid urine chemistry 5-level reference material with gravimetric target concentrations.

2003

**•9560 HDL Cholesterol Verifier Kit**

Developed formulation for liquid HDL / LDL cholesterol reference material with 100% human lipoprotein accommodating multiple freeze-thaw cycles without affecting performance.

2005

**•9670 Ethanol Standard**

Announced breakthrough design offering multi-level calibration verification kit containing pure ethanol as a gravimetric standard in protein base with NIST certification.

2008

**•Verichem Data Reduction Service**

Introduced web-based CLIA Data Reduction for instantaneous and comprehensive reports including peer comparison.

2012

**•BR2 Bilirubin Calibrator**

Custom designed protein-based liquid bilirubin calibrator for the BR2 Bilirubin STAT Analyzer standardized for the direct absorbance total bilirubin method.

2015

**•9240 ISE Standard Kit**

Created a liquid in vitro diagnostic product intended for calibration or calibration verification of serum electrolyte test systems.

2015

**•9020 Urine Uric Acid Standard Kit**

First gravimetrically prepared, liquid standard set for urine uric acid calibration verification.