

### 2025 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 95	List Number 9500			imL)	Price	Price \$210.00		
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, PICRATE	mg/dL	0.2	6.2	12.2	18.2	24.2		
CREATININE, ENZYMATIC	mg/dL	0.1	6.6	13.1	19.7	26.2		
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		
*Triplyceride values are	e obtained	hy gravimetric	weight of alvo	erol expressed	as triolein			

\*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 \$46.00
ANALYTE	UNITS	LEVEL F	
GLUCOSE	mg/dL	1000	
UREA NITROGEN	mg/dL	150	
CREATININE, PICRATE	mg/dL	30.0	
CREATININE, ENZYMATIC	mg/dL	32.7	
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	List Number	9240		(5 X 15	mL)	Price	\$184.00
<ul> <li>protein-based, liquid gravimetric standards</li> </ul>	ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
• intended for calibration verification or calibration	SODIUM	mmol/L	50.0	87.5	125.0	162.5	200.0
<ul> <li>for direct ISE, diluted / indirect ISE and cesium flame</li> </ul>	POTASSIUM	mmol/L	1.00	3.25	5.50	7.75	10.00
<ul> <li>glycol and surfactant free for maximum electrode protection</li> </ul>	CHLORIDE	mmol/L	50.0	87.5	125.0	162.5	200.0
• extended range for high volume analyzers	LITHIUM	mmol/L	0.20	1.30	2.40	3.50	4.60

• NIST verified and lot certified

See full description on page 8 of this catalog.

ELECTROLYTE STANDARD KIT		List Number	9200		(5 X 1	5 mL)	Price S	\$208.00
• protein-based, liquid gravimetric standards		ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E
<ul> <li>intended for calibration verification or calibration</li> <li>suitable for most direct ISE, diluted ISE and cesium flame</li> <li>glycol and surfactant free for maximum electrode protection</li> <li>suitable for lithium direct ISE</li> </ul>		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
specifically designed for benchtop direct ISE		*Ionized Calcium \	alues shown	are approxima	te			
ORDERING INFORMATION	by Mail:	Verichem Labora 90 Narragansett Providence, RI 0	Avenue					
	by Fax:	401-467-1540	by Email	I: customers	ervice@veric	hemlabs.com	I	
Minimum order is \$50.00. All orders shipped Fed	dEx Air Service, F.O	.B. Providence. Shi	ippina costs	are prepaid	and added to	each invoice	. Handling ch	arge of

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 January 1, 2025 and subject to change without notice.



Customer Service toll free (800) 552-5859

### **ENZYME ER™ VERIFIER KIT**

- protein-based, liquid, ready-to-use
- · intended for calibration verification of serum kinetic assays
- · known linear relation stated for all wet chemistry analyzers
- stable 18 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

List Number 9410		(6	X 5 ml	_)	Price \$338.00		
ANALYTE	UNITS*	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E	LEVEL F
ASPARTATE AMINOTRANSFERASE (AST/GOT)	U/L,37℃	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℃	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

- protein-based, liquid, ready-to-use, 18 month stability
- intended to extend the range for calibration verification of AU Chemistry AST only
- · assay value included for all AU Systems

List Number 9417		(1 X 5 mL)	Price \$24.00
ANALYTE	UNITS*	LEVEL G	
ASPARTATE AMINOTRANSFERASE (AST/GOT)	U/L,37℃	1000	

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

### **URINE CHEMISTRY STANDARD KIT**

- 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 24 months from date of manufacture
- · treat as patient specimen with any wet chemistry urine test

List Number 9000			(5 X 1	5 mL)	Price \$286.00		
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	

(5 X 5 mL)

LEVEL C

51

LEVEL B

26

Price \$166.00

LEVEL E

101

LEVEL D

76

### **URINE URIC ACID STANDARD KIT**

- · 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

#### See full description on page 10 of this catalog.

LEVEL A

1

### **MICROPROTEIN STANDARD KIT**

- · 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

List Number 94	(5 X 1	5 mL)	Price \$206.00			
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

List Number 9020

UNITS

mg/dL

ANALYTE

URIC ACID

### MATRIX PLUS™ CHOLESTEROL REFERENCE KIT

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

### MATRIX PLUS™ CHOLESTEROL, LEVEL F

- 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

### **TOTAL PROTEIN / ALBUMIN STANDARD KIT**

- 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

### TOTAL PROTEIN / ALBUMIN STANDARD, LEVEL F

- 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

### HDL CHOLESTEROL VERIFIER KIT

- 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

# VERICHEM®

Customer Service toll free (800) 552-5859

List Number 9550		(5 X 15	mL)	Р	rice \$26	32.00
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

List Number 9556	(1 )	X 15 mL)	Price \$54.00
ANALYTE	UNITS	LEVEL F	
CHOLESTEROL URIC ACID	mg/dL mg/dL	750 30	
	nig/uL	30	

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

List Number 9460			(5 X 15	5 mL)	Price \$208.00			
	ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D LEVEL E		
	TOTAL PROTEIN Human Albumin	g/dL a/dL	1.5 1.5	4.0 2.5	6.5 3.5	9.0 4.5	11.5 5.5	
	HUMAN ALDUMIN	y/uL	1.5	2.5	3.5	4.0	5.5	

List Number 9466	(1 X 15 n	(1 X 15 mL)		
ANALYTE	UNITS	LEVEL F		
TOTAL PROTEIN Human Albumin	g/dL g/dL	14.0 6.5		

List Number 9560		(6 X 5 mL) Price \$440.00					0.00
ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E	LEVEL F
HDL CHOLESTEROL LDL CHOLESTEROL	mg/dL* mg/dL*	10 20	42 83	73 147	105 210	131 263	200 400

\*Typical recovery, values shown are approximate.

#### See full description on page 11 of this catalog.

HUMAN ALBUMIN g/dL 6.5 This product is not sold separately and must be ordered with 9460 Total Protein/Albumin Standard Kit.

### **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 Doumas reference method

### **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 Doumas reference method
- stable 5 days after opening when refrigerated

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

TRU-ZERO™ BILIRUBIN STANDARD	List Number 9456	(2 X 5 I	mL)	Price \$34.00
• identical matrix as Verichem 9450 Bilirubin Standard Kit for	ANALYTE	UNITS	CONCENTRATION	
optimum linearity	TOTAL BILIRUBIN	mg/dL	0.0	
<ul> <li>protein based, ready-to-use liquid</li> </ul>	DIRECT BILIRUBIN	mg/dL	0.0	
<ul> <li>no glycols, azides or surfactants</li> </ul>				
<ul> <li>no special procedures or diluents required</li> </ul>				
<ul> <li>stable 5 days after opening when refrigerated</li> </ul>				

List Number 9459

ANALYTE

**TOTAL BILIRUBIN** 

D	<b>D</b> 2	DII	юн	DIM	CALL	DD	ATOD
D	nz.	DIL	IRU	DIN	UALI	Dh	ATOR

- 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



"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.

List Number 9450		(10)	(5 mL)	ł	Price \$20	J2.00
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<sup>™</sup> Bilirubin Standard as the lowest level standard.

List Number 9436	(2 X 5 mL)		Price \$46.00
ANALYTE	UNITS	LEVEL F	
TOTAL BILIRUBIN	mg/dL	30.0	

(2 X 5 mL)

CONCENTRATION

20.0

UNITS

mg/dL

FOR ADVANCED BR2 BILIRUBIN STAT-ANALYZER ONLY

Price \$50.00

	CARBON DIOXIDE STANDARD KIT	List Number 9210		(5 X 15 mL)			Price \$90.00		
	<ul> <li>aqueous, ready-to-use standards</li> <li>intended for calibration verification or calibration</li> </ul>	ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E	
÷ ®	<ul> <li>Intended for cambration vermication of cambration</li> <li>suitable for most serum ISE or enzymatic methods</li> <li>prepared from reagent grade source materials</li> </ul>	CARBON DIOXIDE	mmol/L	5	10	20	30	40	
	CARBON DIOXIDE STANDARD, LEVEL F	List Number 9216		(1	X 15 m	L)	Price	\$20.00	

ANALYTE

CARBON DIOXIDE

List Number 9040

- identical non-protein matrix as Verichem 9210 Carbon Dioxide Standard Kit for optimum linearity
- ready-to-use liquid

AN

id
 St
 re

- prepared from reagent grade standard source materials
- suitable for most serum ISE or enzymatic methods

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

ANALYTE

AMMONIA

AMMONIA

TOTAL IRON

- 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

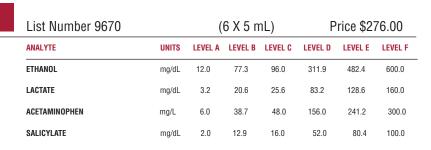
/MONIA / IRON STANDARD, LEVEL F	List Number 9046	(1 X	15 mL)	Price \$26.00
dentical non-protein matrix as Verichem 9040 Ammonia/Iron	ANALYTE	UNITS	LEVEL F	
Standard Kit for optimum linearity	AMMONIA	umal/l	1175	
eady-to-use liquid	AMMONIA	µmol/L mcg/dL	2000	
repared from reagent grade standard source materials	TOTAL IRON	mcg/dL	1000	

 prepared from reagent grade standard source materials
 known concentrations verified against available NIST Standard Reference Material

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



I FVFL F

50

LEVEL C

464

790

250

Price \$152.00

LEVEL E

922

1570

490

LEVEL D

693

1180

370

UNITS

mmol/L

UNITS

umol/L

mcg/dL

mcg/dL

(5 X 15 mL)

LEVEL B

235

400

130

LEVEL A

6

10

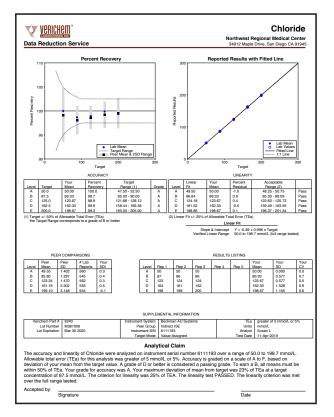
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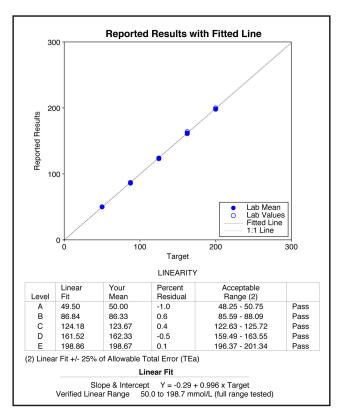
#### See full description on page 9 of this catalog.



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.

### NEW AND IMPROVED WEB BASED DATA REDUCTION SERVICES





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  - 2. Linearity
  - 3. Calibration Verification
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Questions? Contact us Verichem Laboratories Customer Service phone: 800-552-5859 outside USA +1(401)461-0180 email: customerservice@verichemlabs.com



### **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:** \$184.00

### DESCRIPTION

SHELF LIFE: 18 months

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 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



90 Narragansett Avenue, Providence, RI, 02907



### 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 test systems for ethanol, lactate, salicylate and acetaminophen.

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

**PRICE:** \$276.00

SHELF LIFE: 18 months

### DESCRIPTION

The Ethanol Standard Kit is another unprecedented product for calibration or calibration verification. This accurate, liquid reference material spans the entire clinical range for most serum test systems. These protein based standards may be treated as patient specimens with any wet chemistry method.

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 / gravimetric 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 twenty four definitive concentrations is verified using popular clinical methods and available Standard Reference Materials from the National Institute of Standards and Technology (NIST) or available USP Reference Standards. A lot-specific Certificate of Analysis is included in each kit.

In addition to the ethanol component, Verichem's Ethanol Standard Kit contains gravimetric concentrations for lactate, salicylate and acetaminophen. All concentrations are obtained by volumetric dilution of two stock standards. The resultant dilutions possess constant pH and protein content for maximum linearity performance. Concentrations are provided in the product insert and may be used to determine accuracy, 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)

ANALYTE	UNITS	LEVEL A	LEVEL B	LEVEL C	LEVEL D	LEVEL E	LEVEL F	
ETHANOL	mg/dL	12.0	77.3	96.0	311.9	482.4	600.0	
LACTATE	mg/dL	3.2	20.6	25.6	83.2	128.6	160.0	
ACETAMINOPHEN	mg/L	6.0	38.7	48.0	156.0	241.2	300.0	
SALICYLATE	mg/dL	2.0	12.9	16.0	52.0	80.4	100.0	

### **ORDERING INFORMATION:**

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

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





### 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:** \$166.00

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.

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

### **ORDERING INFORMATION:**

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

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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:** \$440.00

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).

ANALYTE	UNITS	LIST NO. 9561 LEVEL A	LIST NO. 9562 LEVEL B	LIST NO. 9563 LEVEL C	LIST NO. 9564 LEVEL D	LIST NO. 9565 LEVEL E	LIST NO. 9566 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.

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### VERICHEM PRODUCTS FOR YOUR ANALYZER (2022)

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	9200 Electrolyte Standard Kit required
	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 (RXL/EXL/Xpand)	All multi-level products compatible, Level (F) optional
	ATELLICA / ADVIA (all models)	All multi-level products compatible, Level (F) optional
	VISTA (all models)	All multi-level products compatible, Level (F) optional
		9200 Electrolyte Standard Kit required for VISTA only
Advanced Instruments:	BR2 BILIRUBIN STAT	9450 Bilirubin Standard Kit, 9436 Bilirubin Standard, Level
		9459 BR2 Bilirubin, 9456 Tru-Zero™ Bilirubin Standard
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
		9200 Electrolyte Standard Kit required
Ortho Clinical:	VITROS	9200 Electrolyte Standard Kit only
Medica Corporation:	EasyLyte	9240 Serum ISE Standard Kit required
	EasyRA	All multi-level products compatible, Level (F) optional
		9200 Electrolyte Standard Kit only
Reichert Technologies:	UNISTAT Bilirubinometer	9450 Bilirubin Standard Kit, 9436 Bilirubin Standard, Level
		9456 Tru-Zero <sup>™</sup> Bilirubin Standard required
Abbott / Abayia:	Diagolo Vareco	0450 Diliguhin Standard Vit 0420 Diliguhin Standard Laura
Abbott / Abaxis:	Piccolo Xpress	9450 Bilirubin Standard Kit, 9436 Bilirubin Standard, Level
		9456 Tru-Zero <sup>™</sup> Bilirubin Standard

	LABORATORIES INC. <sup>®</sup> Leading Development of Clinical Reference Materials since 1988
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.