



## Hycel LISA instructions

rev 415.0.2 - 2010-08-01

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D I A G N O S T I C A

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## Hycel LISA instructions

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### Warning!

These programs should be used only as guideline. To check the reagent correct setting on the instrument, use only good quality control sera and work accordingly to with good laboratory practice. Instrumental factor must be checked. Chema Diagnostica will not be responsible for instrumental bad programming.

**Analyzer: Hycel LISA**Application: **ACID PHOSPHATASE (TOTAL)** - Codes AC 0120 TC

Preparation: POWDER SINGLE REAGENT.

FOLLOW PREPARATION PROGRAM INDICATED IN INSERT SHEET.

Storage: REFRIGERATE AT 2-8°C

Stability: 7 DAYS

**PROGRAM**

ANALYSIS NAME	:	ACID PHOS
SHORT NAME	:	ACP
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	405
EPSILON	:	1290
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	6
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	300
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	30
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	4.7
LOWER NORMAL VALUE	:	0.0
LINEARITY LIMIT	:	75
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	500
BLANK ACCEPT LIMIT	:	20
LIMIT DOT1-DOT0	:	100

**Analyzer: Hycel LISA**Application: **ALBUMIN** - Codes BC 0100 / 0500 / 1000 / 1500 CH

Preparation: LIQUID READY TO USE SINGLE REAGENT

Storage: ROOM TEMPERATURE (2-30°C)

Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	ALBUMIN
SHORT NAME	:	ALB
UNIT	:	g/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	600
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	3
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	5.1
LOWER NORMAL VALUE	:	3.8
LINEARITY LIMIT	:	7
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	600

**Analyzer: Hycel LISA**

Application: **ALKALINE PHOSPHATASE DGKC FL** - Codes AL F080 / F245 / F400 / F600 CH  
Preparation: AS INDICATED IN INSERT SHEET  
Storage: REFRIGERATE AT 2-8°C  
Stability: 30 DAYS

**PROGRAM**

ANALYSIS NAME	:	ALK PHOS
SHORT NAME	:	ALP
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	405
EPSILON	:	1300
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	3
NUMBER OF MEASUREMENTS	:	5
REAGENT 1 VOLUME	:	400
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	12
DILUTION RATE	:	10
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	270
LOWER NORMAL VALUE	:	0
LINEARITY LIMIT	:	2000
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700
BLANK ACCEPT LIMIT	:	20
LIMIT DOT1-DOT0	:	250

**Analyzer: Hycel LISA**

Application: **ALKALINE PHOSPHATASE IFCC FL** - Codes AF F080 / F245 / F400 / F600 CH  
Preparation: AS INDICATED IN INSERT SHEET  
Storage: REFRIGERATE AT 2-8°C  
Stability: 30 DAYS

**PROGRAM**

ANALYSIS NAME	:	ALK PHOS
SHORT NAME	:	ALP
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	405
EPSILON	:	1300
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	3
NUMBER OF MEASUREMENTS	:	5
REAGENT 1 VOLUME	:	400
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	12
DILUTION RATE	:	10
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	104
LOWER NORMAL VALUE	:	35
LINEARITY LIMIT	:	2000
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700
BLANK ACCEPT LIMIT	:	20
LIMIT DOT1-DOT0	:	250

**Analyzer: Hycel LISA**

Application: **AMYLASE FL** - Codes AM F060 / F120 / F245 CH  
 Preparation: LIQUID READY TO USE SINGLE REAGENT  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	AMYLASE
SHORT NAME	:	AMY
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	405
EPSILON	:	530
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	3
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	400
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	10
DILUTION RATE	:	5
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	90
LOWER NORMAL VALUE	:	0
LINEARITY LIMIT	:	2000
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	400
BLANK ACCEPT LIMIT	:	10
LIMIT DOT1-DOT0	:	250



**Analyzer: Hycel LISA**

Application: **AMYLASE EPS FL** - Codes EA F080 / F245 CH  
Preparation: AS INDICATED IN INSERT SHEET  
Storage: REFRIGERATE AT 2-8°C  
Stability: 30 DAYS

**PROGRAM**

ANALYSIS NAME	:	AMYLASE
SHORT NAME	:	AMY
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	405
EPSILON	:	910
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	3
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	400
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	10
DILUTION RATE	:	5
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	100
LOWER NORMAL VALUE	:	28
LINEARITY LIMIT	:	1500
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	400
BLANK ACCEPT LIMIT	:	10
LIMIT DOT1-DOT0	:	250

**Analyzer: Hycel LISA**Application: **BICARBONATE FL** - Codes BR F120 / F245 / F400 CH

Preparation: LIQUID READY TO USE SINGLE REAGENT

Storage: REFRIGERATE AT 2-8°C

Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	BICARBONATE
SHORT NAME	:	CO2
UNIT	:	mmol/l
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	405
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	53
LOWER NORMAL VALUE	:	13
LINEARITY LIMIT	:	2500
BLANK LOWER LIMIT	:	200
BLANK UPPER LIMIT	:	2000

**Analyzer: Hycel LISA**

Application: **BILIRUBIN TOTAL FL** - Code DT F125 / F500 CH  
 Preparation: REAGENT A - INSTALL AS "REAGENT 1"  
 REAGENT B - INSTALL AS "REAGENT 2"  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	BILIRUBIN T
SHORT NAME	:	BIT
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	500
STD=0 IN CURVE	:	YES
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	YES
NUMBER OF MEASUREMENTS	:	13
REAGENT 1 VOLUME	:	400
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	100
REAGENT 2 DILUENT	:	10
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	20
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	1.2
LOWER NORMAL VALUE	:	0.1
LINEARITY LIMIT	:	20
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	300

**Analyzer: Hycel LISA**Application: **BILIRUBIN DIRECT FL** - Code DD F125 / F500 CH

Preparation: REAGENT A - INSTALL AS "REAGENT 1"

REAGENT B - INSTALL AS "REAGENT 2"

Storage: REFRIGERATE AT 2-8°C

Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL (ONLY "REAGENT 1")

**PROGRAM**

ANALYSIS NAME	:	BILIRUBIN D
SHORT NAME	:	BID
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	560
STD=0 IN CURVE	:	YES
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	YES
NUMBER OF MEASUREMENTS	:	13
REAGENT 1 VOLUME	:	400
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	100
REAGENT 2 DILUENT	:	10
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	20
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	0.2
LOWER NORMAL VALUE	:	0.0
LINEARITY LIMIT	:	20
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	300

**Analyzer: Hycel LISA**

Application: **CALCIUM** - Code CA 0305 / 0505 CH  
 Preparation: MIX 1 PART OF REAGENT A WITH 1 PART OF REAGENT B  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: 7 DAYS

**PROGRAM**

ANALYSIS NAME	:	CALCIUM
SHORT NAME	:	CA
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	560
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	10
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	10.8
LOWER NORMAL VALUE	:	8.8
LINEARITY LIMIT	:	20
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700

**Analyzer: Hycel LISA**

Application: **CALCIUM ASX** - Code CA 0100 / 0500 CH  
 Preparation: LIQUID REAGENT READY TO USE  
 Storage: ROOM TEMPERATURE (2-30°C)  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	CALCIUM
SHORT NAME	:	CA
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	620
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	10.8
LOWER NORMAL VALUE	:	8.8
LINEARITY LIMIT	:	20
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700

**Analyzer: Hycel LISA**

Application: **CHLORIDE** - Code CL 0100 / 0500 CH  
 Preparation: LIQUID READY TO USE SINGLE REAGENT  
 Storage: ROOM TEMPERATURE (2-30°C)  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	CHLORIDE
SHORT NAME	:	CL
UNIT	:	mEq/l
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	500
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	3
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	110
LOWER NORMAL VALUE	:	98
LINEARITY LIMIT	:	200
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700

**Analyzer: Hycel LISA**

Application: **CHOLESTEROL FL** - Codes CT F100 / F400 / 100F / 150F CH  
 Preparation: LIQUID READY TO USE SINGLE REAGENT  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	CHOLESTEROL
SHORT NAME	:	CHOL
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	500
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	200
LOWER NORMAL VALUE	:	140
LINEARITY LIMIT	:	800
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700



**Analyzer: Hycel LISA**

Application: **HDL-DIRECT FL** - Code HD F080 / F245 / F400 CH  
 Preparation: REAGENT A - INSTALL AS "REAGENT 1"  
 REAGENT B - INSTALL AS "REAGENT 2"  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: 60 DAYS ON BOARD

**PROGRAM**

ANALYSIS NAME	:	HDL
SHORT NAME	:	HDL
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	600
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	YES
NUMBER OF MEASUREMENTS	:	13
REAGENT 1 VOLUME	:	300
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	100
REAGENT 2 DILUENT	:	10
REAGENT 2 POSITION	:	DEFINE
SAMPLE VOLUME	:	4
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	79
LOWER NORMAL VALUE	:	35
LINEARITY LIMIT	:	250
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	500

**Analyzer: Hycel LISA**

Application: **LDL-DIRECT FL** - Code DL F080 CH  
 Preparation: REAGENT A - INSTALL AS "REAGENT 1"  
 REAGENT B - INSTALL AS "REAGENT 2"  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: 60 DAYS ON BOARD

**PROGRAM**

ANALYSIS NAME	:	LDL
SHORT NAME	:	LDL
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	600
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	YES
NUMBER OF MEASUREMENTS	:	13
REAGENT 1 VOLUME	:	300
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	100
REAGENT 2 DILUENT	:	10
REAGENT 2 POSITION	:	DEFINE
SAMPLE VOLUME	:	4
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	218
LOWER NORMAL VALUE	:	76
LINEARITY LIMIT	:	400
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	500

**Analyzer: Hycel LISA**

Application: **CHOLINESTERASE FL (DGKC)** - Codes CH F096 / F245 CH  
 Preparation: MIX REAGENT A AND REAGENT B AS INDICATED IN INSERT SHEET  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: 15 DAYS

**PROGRAM**

ANALYSIS NAME	:	CHOLINESTERASE
SHORT NAME	:	CHE
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	405
EPSILON	:	-9270
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	3
NUMBER OF MEASUREMENTS	:	3
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	10
DILUTION RATE	:	5
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	11200
LOWER NORMAL VALUE	:	5600
LINEARITY LIMIT	:	20000
BLANK LOWER LIMIT	:	700
BLANK UPPER LIMIT	:	2000
BLANK ACCEPT LIMIT	:	20
LIMIT DOT1-DOTO	:	0

**NOTE FOR DIBUCAINE NUMBER EXECUTION :**

Prepare the reagent using auxiliary reactive  
 CH F080 CH DIBUCAINE.  
 For testing follow the above given cholinesterase  
 program. Calculate dibucaine number as indicated in  
 insert sheet.

**Analyzer: Hycel LISA**

Application: **CK-NAC FL** - Codes CK F060 / F120 / F245 CH  
Preparation: AS INDICATED IN INSERT SHEET  
Storage: REFRIGERATE AT 2-8°C  
Stability: 30 DAYS

**PROGRAM**

ANALYSIS NAME	:	CKNAC
SHORT NAME	:	CK
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	340
EPSILON	:	622
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	5
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	400
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	16
DILUTION RATE	:	10
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	190
LOWER NORMAL VALUE	:	15
LINEARITY LIMIT	:	1600
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	400
BLANK ACCEPT LIMIT	:	20
LIMIT DOT1-DOT0	:	500

**Analyzer: Hycel LISA**

Application: **CK-MB FL** - Code MB F060 / F120 CH  
 Preparation: AS INDICATED IN INSERT SHEET  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: 10 DAYS

**PROGRAM**

ANALYSIS NAME	:	CKMB
SHORT NAME	:	MB
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	340
EPSILON	:	622
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	6
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	400
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	16
DILUTION RATE	:	10
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	24
LOWER NORMAL VALUE	:	0
LINEARITY LIMIT	:	1600
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	400
BLANK ACCEPT LIMIT	:	20
LIMIT DOT1-DOT0	:	500

**Analyzer: Hycel LISA**

Application: **COPPER** - Code CU 0100 CH  
 Preparation: AS INDICATED IN INSERT SHEET  
 Storage: REFRIGERATE AT 2-8°C (ATTENTION! REAGENT COULD CONDENSATE)  
 Stability: 14 DAYS

**PROGRAM**

ANALYSIS NAME	:	COPPER
SHORT NAME	:	CU
UNIT	:	microg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	560
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	30
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	140
LOWER NORMAL VALUE	:	70
LINEARITY LIMIT	:	500
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700

**Analyzer: Hycel LISA**

Application: **CREATININE** - Code CR 0500 / 1000 / 1500 CH  
 Preparation: MIX 1 PART OF REAGENT A WITH 1 PART OF REAGENT B  
 Storage: ROOM TEMPERATURE (2-30°C)  
 Stability: 14 DAYS

**PROGRAM**

ANALYSIS NAME	:	CREATININE
SHORT NAME	:	CREA
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	500
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. -+	:	DEFINE
WAITING CYCLES	:	1
NUMBER OF MEASUREMENTS	:	5
REAGENT 1 VOLUME	:	300
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	30
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	1.2
LOWER NORMAL VALUE	:	0.5
LINEARITY LIMIT	:	12
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	400

**Analyzer: Hycel LISA**

Application: **GAMMA-GT FL** - Codes GT F080 / F245 / F400 / F600 CH  
Preparation: AS INDICATED IN INSERT SHEET  
Storage: REFRIGERATE AT 2-8°C  
Stability: 60 DAYS

**PROGRAM**

ANALYSIS NAME	:	GAMMA GT
SHORT NAME	:	GGT
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	405
EPSILON	:	800
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	3
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	300
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	30
DILUTION RATE	:	5
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	47
LOWER NORMAL VALUE	:	10
LINEARITY LIMIT	:	800
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	600
BLANK ACCEPT LIMIT	:	5
LIMIT DOT1-DOT0	:	250



**Analyzer: Hycel LISA**

Application: **GLUCOSE FL** - Codes GL F400 / 100F / 150F CH  
 Preparation: LIQUID READY TO USE SINGLE REAGENT  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	GLUCOSE
SHORT NAME	:	GLUC
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	500
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	110
LOWER NORMAL VALUE	:	60
LINEARITY LIMIT	:	500
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700

**Analyzer: Hycel LISA**

Application: **GLUCOSE UV FL** - Code GL F601 CH  
 Preparation: AS INDICATED IN INSERT SHEET  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: 60 DAYS

**PROGRAM**

ANALYSIS NAME	:	GLUCOSE
SHORT NAME	:	GLUC
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	340
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	110
LOWER NORMAL VALUE	:	60
LINEARITY LIMIT	:	700
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700

**Analyzer: Hycel LISA**

Application: **GOT/AST FL** - Codes GO F080 / F245 / F400 / F600 CH  
Preparation: AS INDICATED IN INSERT SHEET  
Storage: REFRIGERATE AT 2-8°C  
Stability: 30 DAYS

**PROGRAM**

ANALYSIS NAME	:	GOTAST
SHORT NAME	:	GOT
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	340
EPSILON	:	-622
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	5
NUMBER OF MEASUREMENTS	:	5
REAGENT 1 VOLUME	:	300
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	30
DILUTION RATE	:	5
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	40
LOWER NORMAL VALUE	:	0
LINEARITY LIMIT	:	400
BLANK LOWER LIMIT	:	1000
BLANK UPPER LIMIT	:	2000
BLANK ACCEPT LIMIT	:	5
LIMIT DOT1-DOT0	:	500

**Analyzer: Hycel LISA**

Application: **GPT/ALT FL** - Codes GP F080 / F245 / F400 / F600 CH  
 Preparation: AS INDICATED IN INSERT SHEET  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: 30 DAYS

**PROGRAM**

ANALYSIS NAME	:	GPTALT
SHORT NAME	:	GPT
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	340
EPSILON	:	-622
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	5
NUMBER OF MEASUREMENTS	:	5
REAGENT 1 VOLUME	:	300
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	30
DILUTION RATE	:	5
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	40
LOWER NORMAL VALUE	:	0
LINEARITY LIMIT	:	400
BLANK LOWER LIMIT	:	1000
BLANK UPPER LIMIT	:	2000
BLANK ACCEPT LIMIT	:	5
LIMIT DOT1-DOT0	:	500

**Analyzer: Hycel LISA**

Application: **IRON CRX** - Code FE 0100 / 0500 CH  
 Preparation: LIQUID REAGENT READY TO USE  
 Storage: ROOM TEMPERATURE (2-30°C)  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	IRON
SHORT NAME	:	IRON
UNIT	:	microg/l
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	620
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	20
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	158
LOWER NORMAL VALUE	:	59
LINEARITY LIMIT	:	500
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	800

**Analyzer: Hycel LISA**

Application: **IRON FZ** - Code FE F245 / F400 CH  
 Preparation: REAGENT A - INSTALL AS "REAGENT 1"  
 REAGENT B - PREPARE AS PER DATA SHEET - INSTALL AS "REAGENT 2"  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	IRONFZ
SHORT NAME	:	IRON
UNIT	:	micro/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	560
STD=0 IN CURVE	:	YES
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	YES
NUMBER OF MEASUREMENTS	:	13
REAGENT 1 VOLUME	:	400
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	100
REAGENT 2 DILUENT	:	10
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	30
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	158
LOWER NORMAL VALUE	:	59
LINEARITY LIMIT	:	1000
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	500

**Analyzer: Hycel LISA**

Application: **LDH FL** - Codes LD F060 / F120 / F245 CH  
Preparation: AS INDICATED IN INSERT SHEET  
Storage: REFRIGERATE AT 2-8°C  
Stability: 30 DAYS

**PROGRAM**

ANALYSIS NAME	:	LDH
SHORT NAME	:	LDH
UNIT	:	UL
MEASUREMENT TYPE	:	KINETIC
WAVELENGTH	:	340
EPSILON	:	-622
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	3
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	10
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	450
LOWER NORMAL VALUE	:	230
LINEARITY LIMIT	:	3000
BLANK LOWER LIMIT	:	1000
BLANK UPPER LIMIT	:	2000
BLANK ACCEPT LIMIT	:	20
LIMIT DOT1-DOT0	:	250

**Analyzer: Hycel LISA**

Application: **MAGNESIUM** - Code MG 0200 / 0500 CH  
 Preparation: MIX 1 PART OF REAGENT A WITH 1 PART OF REAGENT B  
 Storage: ROOM TEMPERATURE (2-30°C)  
 Stability: 30 DAYS

**PROGRAM**

ANALYSIS NAME	:	MAGNESIUM
SHORT NAME	:	MG
UNIT	:	mEq/l
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	500
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	2.1
LOWER NORMAL VALUE	:	1.3
LINEARITY LIMIT	:	10
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700



**Analyzer: Hycel LISA**

Application: **MAGNESIUM XL** - Code MX 0300 / 0500 CH  
Preparation: LIQUID REAGENT READY TO USE  
Storage: REFRIGERATE AT 2-8°C  
Stability: 30 DAYS

**PROGRAM**

ANALYSIS NAME	:	MAGNESIUM
SHORT NAME	:	MG
UNIT	:	mEq/l
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	560
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	6
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	2.1
LOWER NORMAL VALUE	:	1.3
LINEARITY LIMIT	:	10
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700

**Analyzer: Hycel LISA**

Application: **PHOSPHORUS** - Code PH 0100 / 0500 CH  
 Preparation: LIQUID READY TO USE SINGLE REAGENT  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	PHOSPHORUS
SHORT NAME	:	PHOS
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	340
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	13
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	4.5
LOWER NORMAL VALUE	:	3.0
LINEARITY LIMIT	:	15
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700

**Analyzer: Hycel LISA**

Application: **PROTEINS (TOTAL)** - Codes TP 0100 / 0500 / 1000 / 1500 CH  
 Preparation: LIQUID READY TO USE SINGLE REAGENT  
 Storage: ROOM TEMPERATURE (2-30°C)  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	PROTEINS
SHORT NAME	:	TP
UNIT	:	g/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	560
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	8.4
LOWER NORMAL VALUE	:	6.3
LINEARITY LIMIT	:	12
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	500

**Analyzer: Hycel LISA**

Application: **PROTEINS HS** - Code HS 0100 / 0500 CH  
 Preparation: LIQUID READY TO USE SINGLE REAGENT  
 Storage: ROOM TEMPERATURE (2-30°C)  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	PROTEINSHS
SHORT NAME	:	HS
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	600
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	3
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	141
LOWER NORMAL VALUE	:	28
LINEARITY LIMIT	:	500
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	500

**Analyzer: Hycel LISA**

Application: **TRIGLYCERIDES FL** - Codes TR F100 / F400 / 100F / 150F CH  
 Preparation: LIQUID READY TO USE SINGLE REAGENT  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	TRIGLYCERIDES
SHORT NAME	:	TRIG
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	500
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	190
LOWER NORMAL VALUE	:	0
LINEARITY LIMIT	:	1000
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700

**Analyzer: Hycel LISA**

Application: **UREA UV FL** - Codes AZ F080 / F245 / F400 / F600 CH  
 Preparation: AS INDICATED IN INSERT SHEET  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: 60 DAYS

**PROGRAM**

ANALYSIS NAME	:	UREA
SHORT NAME	:	URE
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	340
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. -+	:	DEFINE
WAITING CYCLES	:	1
NUMBER OF MEASUREMENTS	:	5
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	5
DILUTION RATE	:	5
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	50
LOWER NORMAL VALUE	:	10
LINEARITY LIMIT	:	300
BLANK LOWER LIMIT	:	1000
BLANK UPPER LIMIT	:	2000

**Analyzer: Hycel LISA**

Application: **URIC ACID T FL** - Code AU F402 CH  
 Preparation: AS INDICATED IN INSERT SHEET  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: 90 DAYS

Application: **IRON FZ** - Code FE  
 Preparation: REAGENT A - INSTA  
 REAGENT B - PREPA  
 Storage: REFRIGERATE AT 2-  
 Stability: UP TO DECLARED EX

**PROGRAM**

ANALYSIS NAME	:	URIC ACID	ANALYSIS NAME
SHORT NAME	:	UA	SHORT NAME
UNIT	:	mg/dl	UNIT
MEASUREMENT TYPE	:	PF STD	MEASUREMENT TYPE
WAVELENGTH	:	560	WAVELENGTH
STD=0 IN CURVE	:	NO	STD=0 IN CURVE
NUMBER OF STANDARDS	:	3	NUMBER OF STANDARDS
STD 1 POSITION	:	DEFINE	STD 1 POSITION
STD 1 VALUE	:	DEFINE	STD 1 VALUE
STD 2 POSITION	:	DEFINE	STD 2 POSITION
STD 2 VALUE	:	DEFINE	STD 2 VALUE
STD 3 POSITION	:	DEFINE	STD 3 POSITION
STD 3 VALUE	:	DEFINE	STD 3 VALUE
REPLIC. STD/CTRLS	:	3	REPLIC. STD/CTRLS
CONTROL VALUE	:	DEFINE	CONTROL VALUE
CONTROL POSITION	:	DEFINE	CONTROL POSITION
LIM. ACCPT. CTRL. +-	:	DEFINE	LIM. ACCPT. CTRL. +-
WAITING CYCLES	:	0	WAITING CYCLES
TO READING	:	NO	TO READING
NUMBER OF MEASUREMENTS	:	14	NUMBER OF MEASUREMENTS
REAGENT 1 VOLUME	:	500	REAGENT 1 VOLUME
REAGENT 1 DILUENT	:	10	REAGENT 1 DILUENT
REAGENT 1 POSITION	:	DEFINE	REAGENT 1 POSITION
REAGENT 2 VOLUME	:	0	REAGENT 2 VOLUME
REAGENT 2 DILUENT	:	0	REAGENT 2 DILUENT
REAGENT 2 POSITION	:	0	REAGENT 2 POSITION
SAMPLE VOLUME	:	15	SAMPLE VOLUME
DILUTION RATE	:	3	DILUTION RATE
WASH CYCLES	:	3	WASH CYCLES
UPPER NORMAL VALUE	:	7.0	UPPER NORMAL VALUE
LOWER NORMAL VALUE	:	3.5	LOWER NORMAL VALUE
LINEARITY LIMIT	:	25	LINEARITY LIMIT
BLANK LOWER LIMIT	:	0	BLANK LOWER LIMIT
BLANK UPPER LIMIT	:	700	BLANK UPPER LIMIT

**Analyzer: Hycel LISA**

Application: **URIC ACID AOX FL** - Code AX F100 / F250 / F600 CH  
 Preparation: REAGENT A - INSTALL AS "REAGENT 1"  
 REAGENT B - INSTALL AS "REAGENT 2"  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: UP TO DECLARED EXPIRATION ON REAGENT LABEL

**PROGRAM**

ANALYSIS NAME	:	URIC ACID
SHORT NAME	:	UA
UNIT	:	mg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	560
STD=0 IN CURVE	:	YES
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	YES
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	400
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	100
REAGENT 2 DILUENT	:	10
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	20
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	7.0
LOWER NORMAL VALUE	:	3.5
LINEARITY LIMIT	:	35
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700



**Analyzer: Hycel LISA**

Application: **ZINC** - Code ZN 0125 CH  
 Preparation: AS INDICATED IN INSERT SHEET  
 Storage: REFRIGERATE AT 2-8°C  
 Stability: 14 DAYS

**PROGRAM**

ANALYSIS NAME	:	ZINC
SHORT NAME	:	ZN
UNIT	:	microg/dl
MEASUREMENT TYPE	:	PF STD
WAVELENGTH	:	600
STD=0 IN CURVE	:	NO
NUMBER OF STANDARDS	:	3
STD 1 POSITION	:	DEFINE
STD 1 VALUE	:	DEFINE
STD 2 POSITION	:	DEFINE
STD 2 VALUE	:	DEFINE
STD 3 POSITION	:	DEFINE
STD 3 VALUE	:	DEFINE
REPLIC. STD/CTRLS	:	3
CONTROL VALUE	:	DEFINE
CONTROL POSITION	:	DEFINE
LIM. ACCPT. CTRL. +-	:	DEFINE
WAITING CYCLES	:	0
TO READING	:	NO
NUMBER OF MEASUREMENTS	:	14
REAGENT 1 VOLUME	:	500
REAGENT 1 DILUENT	:	10
REAGENT 1 POSITION	:	DEFINE
REAGENT 2 VOLUME	:	0
REAGENT 2 DILUENT	:	0
REAGENT 2 POSITION	:	0
SAMPLE VOLUME	:	25
DILUTION RATE	:	3
WASH CYCLES	:	3
UPPER NORMAL VALUE	:	150
LOWER NORMAL VALUE	:	70
LINEARITY LIMIT	:	500
BLANK LOWER LIMIT	:	0
BLANK UPPER LIMIT	:	700