Do not use the reagent if:
1. The reagent is turbid.
2. The reagent blank has an absorbance of 0.50 or greater at 520nm.
3. The working reagent does not meet stated performance parameters.

SPECIMEN COLLECTION AND STORAGE
1. Non-hemolyzed serum is recommended.
2. Uric Acid in serum is stable for three days at 2-8°C and up to six months when frozen.

INTERFERENCE
Studies to determine the level of interference for hemoglobin, bilirubin, and lipemia were carried out, the following results were obtained:

Hemoglobin:
Do not use hemolyzed samples.

Bilirubin:
No significant interference (± 10%) from bilirubin up to 3.5 mg/dL.

Lipemia:
No significant interference (± 10%) from lipemia up to 879.5 mg/dL measured as triglycerides.

See Young, et al.11 for other interfering substances.

ADDITIONAL EQUIPMENT REQUIRED BUT NOT PROVIDED
1. LIASYS 330 Clinical Chemistry System
2. Deionized water and related equipment, e.g.: pipettes
3. LIASYS 330 analyzer specific consumables, e.g.: sample cups
4. Control, and Calibrator materials such as those provided by AMS Diagnostics

ASSAY PROCEDURE

Uric Acid (Liquid)

Temperature: 37°C
Wave length: 520 nm
ASSAY TYPE: End Point
DIRECTION: Increase
SAMPLE / RGT RATIO: 1 : 50 e.g. Sample Vol. 0.003 mL (3mL) Reagent Vol. 0.150 mL (150 mL)
INCUBATION TIME: 5 min

Procedure Note:
The reagent and sample volumes may be altered proportionally to accommodate various instrument requirements.

Calculations:
\[ \text{A (patient)} \times \text{Concentration of standard} = \text{Uric Acid} \]
\[ \text{A (standard)} \]
\[ \text{mg/dL} \]
\[ \text{mg/dL} \]

Example:
A (patient) = 0.071
A (standard) = 0.302
Concentration of standard = 12.1 mg/dL.

0.071 \times 12.1 = 2.8 mg/dL Uric Acid
0.302

Limitations:
1. Samples with values exceeding 25.0 mg/dL should be diluted 1:1 with saline and re-run. The final answer should be multiplied by two.
2. The reagent and sample volumes may be altered proportionally to accommodate various instrument requirements.

CALIBRATION
Use an aqueous Uric Acid standard, or an appropriate serum calibrator.

QUALITY CONTROL

The integrity of the reaction should be monitored by use of a two level control with known Uric Acid values.

EXPECTED VALUES
Child: 2.0 – 5.5 mg/dL
Adult Male: 3.5 – 7.2 mg/dL
Adult Female: 2.6 – 6.0 mg/dL

It is strongly recommended that each laboratory establish its own normal range.

PERFORMANCE
Linearity:
When run as recommended the assay is linear from 0.0 to 25.0 mg/dL

INTERFERENCE:
Studies performed between this procedure and a similar methodology yielded the following results:

- Number of samples pairs: 46
- Range of samples: 1.7 – 20.7 (mg/dL)
- Correlation Coefficient: 0.9896
- Slope: 0.9962
- Intercept: 0.12 (mg/dL)

REFERENCE