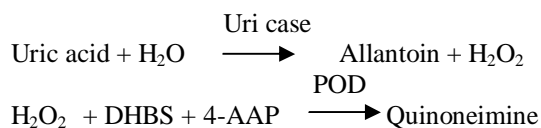


**PRINCIPLE:**

Uric acid is converted to allantoin and H<sub>2</sub>O<sub>2</sub> by Uricase, the H<sub>2</sub>O<sub>2</sub> formed is further oxidizes the 2, 4-dichlorophenolsulphonate (DHBS) and 4-aminoantipyrine (4-AAP) to form a red-violet quinoneimine under the influence of peroxidase (POD). The intensity of the colour is proportional to the concentration of uric acid.

**REAGENT COMPOSITION:**

1. Monoreagent
2. Uric acid standard      5 mg/dl

**REAGENT PREPARATION:**

Ready to use.

**STORAGE & STABILITY:**

Store at 2-8° C, and keep away from light. Unopened reagent is stable until expiry date stated on the label.

**SAMPLE:**

Unhemolysed serum or heparinised plasma can be used

**AUTOMATED PARAMETERS:**

Parameter	Test
Reaction type	Endpoint (Uricase)
Wavelength	505 nm (490-520 nm)
Reaction temperature	37° C
Incubation	10 min.
Blank	Reagent
Reagent blank limit	< 0.2 O.D
Sample volume	50 µl
Reagent volume	1000 µl
Standard concentration	5mg/dl
Linearity	20mg/dl

**PROCEDURE:**

Let stand reagents and specimens at room temperature.

Tube	Blank	Standard	Test
Reagent	1000µl	1000 µl	1000 µl
Standard	-	50 µl	-
Sample	-	-	50 µl
Mix and Incubate @ 37 °C for 10 min. Read the absorbance at 500 (490-520nm) against reagent blank. Colour formed is stable for atleast 15 min at room tempt.			

**CALCULATIONS:**

Calculate the result as follows:

$$\text{Uric acid (mg/dl)} = \frac{A_{\text{sample}}}{A_{\text{standard}}} \times 5.$$

**Expected Value:**

	<b>Men</b>	<b>Women</b>
Serum	: 3.5-7.0mg/dl	2.5-5.7mg/dl

Each lab should optimize its own normal range.

**REFERENCE:**

1. Trinder P. Ann.Clin.Biochem., 6,24 (1996)
2. Pileggi Rand Barthelmai W. klin. Wochenschr 40, 585-589 (1962).