



## **MISCELLANEOUS CHEMISTRIES**

### **TESTS:**

Uric Acid

Iron

Total Iron Binding Capacity (TIBC)

LDH (Lactate Dehydrogenase)

γGT (Gamma Glutamyltransferase)

### **PRINCIPLE:**

The VITROS slides are dry, multilayered analytical elements coated on polyester supports. A small amount of patient sample is deposited onto the slide and evenly distributed to all of the layers. The spreading layer contains the appropriate substrate and other components needed for the reaction. The analyte in the sample catalyzes the reaction sequence to yield products which absorb light at wavelengths in various regions (340 – 680nm), diffuses into the underlying layer, and is monitored by reflectance spectrophotometry. The test types are colorimetric, enzymatic end point, two-point or multi-point rate, or potentiometric. The rate of change in reflection density is converted to enzymatic activity or the amount of colored complex formed is proportional to the analyte concentration in the sample.

### **SPECIMEN REQUIREMENTS:**

2 ml serum from blood collected in red top tube without additive or in a serum separator tube with gel barrier. Separate the serum from the clot to avoid hemolysis: red top tube – transfer serum into plastic transport vial, gel tube – spin. Transport to the lab at room temperature. Store at room temperature for up to 8h, refrigerate for up to 48h. Store frozen at -20°C or below for up to 30 days. Avoid repeated freeze-thaw cycles.

### **METHOD:**

Dry Slide Chemistry.

### **REFERENCES:**

1. Test Methodology, VITROS Chemistry Products. August 1997, Johnson & Johnson Clinical Diagnostics, Inc.

### **Normal Range:**

**Uric Acid: Female: 17-34 years of age: 2.5-6.2 mg/dl**

**35-44 years of age: 2.5-7.0 mg/dl**

**> 44 years of age: 2.5-7.5 mg/dl**

**Male: 3.5-8.5 mg/dl**

**LDH: 313-618 U/L**

**Iron: Female: 37-170 ug/dl**

**Male: 49-181 ug/dl**

**TIBC: Female: 265-497 ug/dl**

**Male: 261-462 ug/dl**

**γGT: 12-58 U/L**

**Turnaround time: 2 days**