

POTASSIUM fluid

1 x 100 ml

88 11 11

PRINCIPLE

The potassium liquid test is based on the principle of turbidimetric analysis where potassium ions (without deproteinization) form a stable suspension. The turbidity which has been formed is proportional to the potassium concentration up to 10 mmol/l.

REAGENTS

R1:	Sodium hydroxide	0.5 mol/l
	Tetraphenylborate-sodium Stabilizer	240.0 mmol/l
R2:	Standard	5.0 mmol/l

The sealed reagents are stable up to the indicated expiry date if stored at +18° - +22°C.

REFERENCE VALUE

Serum	3.6 - 5.5 mmol/l
Plasma	4.0 - 4.8 mmol/l

SAMPLE MATERIAL

Serum, plasma.

QUALITY CONTROL

All control sera with values determined by this method can be used. We recommend to use **AXIOM** control sera.

PREPARATION AND STABILITY OF THE REAGENTS

The working reagent is ready for use.

After opening contamination is to be avoided.

Stability: 30 days at +18° - +22°C.

ASSAY PROCEDURE

Wavelength:	Hg 578 nm
Temperature:	25 ° - 37 °C
Measurement:	against reagent blank

Pipette into cuvette:
semi-micro

Sample	20µl
R1	1000µl

Mix and incubate at 25° C for 5' or at 37° C for 3'. To produce a homogeneous turbidity, mix well before reading. Measure the absorbance of the standard A_{STD} and the sample A_S against reagent blank A_{RBL} .

CALCULATION AND LINEARITY

$$A_S - A_{RBL} / A_{STD} - A_{RBL} \times 5 = \text{mval (mmol/l) potassium}$$

The reaction is linear up to potassium levels of 10 mmol/l. Samples with higher concentrations have to be diluted 1:1 with physiological saline (0.9 %). Multiply the result by 2.

NOTE

The use of disposable articles is strictly recommended as any contamination will disturb the potassium assay. Non-hemolytic serum is to be used exclusively.

REFERENCES

- Hilmann, G.: Beyer, G.: Z. Klin. Biochem. 5 (1967), 93
Hoeflmayr, J.: Praxis und Helferlin 8 (1979)
Tietz, N. W.: Fundamentals of Clin. Chem. (1976), 876