

GLUCOSE (GLUC)

GOD/PAP (LIQUID) MANUAL

INTENDED USE

For the quantitative *in vitro* determination of Glucose in blood, serum and plasma. This product is suitable for Manual use

Cat. No.				
GL 2623		R1.	Glucose Reagent	6 x 100 ml
	c	CAL.	Standard	1 x 5 ml
GL 2614		R1.	Glucose Reagent	2 x 500 ml
		CAL.	Standard	1 x 5 ml
GL 2610		R1.	Glucose Reagent	6 x 1 Litre
		CAL.	Standard	1 x 5 ml

PRINCIPLE

Glucose is determined after enzymatic oxidation in the presence of glucose oxidase. The hydrogen peroxide formed reacts, under catalysis of peroxidase, with phenol and 4-aminophenazone to form a red - violet quinoneimine dye as indicator.

REACTION PRINCIPLE(1)

Glucose + O_2 + H_2O_{\longrightarrow} gluconic acid + H_2O_2

 $2H_2O_2$ + 4-aminophenazone+phenol \longrightarrow quinoneimine+ $4H_2O$

SAMPLE

Blood, serum, heparinized plasma, EDTA plasma. Glucose is stable for 24 hours at +2 to +8°C if the serum or plasma is prepared within 30 min of collection.

REAGENT COMPOSITION

Cont	ents	Initial Concentration of Solutions
R1.	Glucose Reagent	
	Phosphate Buffer	50 mmol/l, pH 7.0
	MOPS Buffer	50 mmol/l, pH 7.0
	Phenol	11 mmol/l
	4-aminophenazone	0.77 mmol/l
	Glucose oxidase	≥1.5 kU/l
	Peroxidase	≥1.5 kU/l
CAL.	Standard	
	Glucose	5.5 mmol/l (100 mg/dl)

SAFETY PRECAUTIONS AND WARNINGS

For *in vitro* diagnostic use only. Do not pipette by mouth. Exercise the normal precautions required for handling laboratory reagents.

Reagent contains Sodium Azide. Avoid ingestion or contact with skin or mucous membranes. In case of skin contact, flush affected area with copious amounts of water. In case of contact with eyes or if ingested, seek immediate medical attention.

Sodium Azide reacts with lead and copper plumbing, to form potentially explosive azides. When disposing of such reagents flush with large volumes of water to prevent azide build up. Exposed metal surfaces should be cleaned with 10% sodium hydroxide.

Health and Safety data sheets are available on request.

Please dispose of all Biological and Chemical materials according to local guidelines.

The reagents must be used only for the purpose intended by suitably qualified laboratory personnel, under appropriate laboratory conditions.

STABILITY AND PREPARATIONS OF REAGENTS

R1. Glucose Reagent

Contents ready for use. Stable up to the expiry date when stored at +2 to +8°C.

CAL. Standard

Contents ready for use. Stable up to the expiry date when stored at +2 to +8°C.

MATERIALS PROVIDED

Glucose Reagent Standard

MATERIALS REQUIRED BUT NOT PROVIDED

Randox Assayed Multi-sera Level 2 (Cat. No. HN 1530) and Level 3 (Cat. No. HE 1532). Uranyl Acetate 0.16%.

NOTE

A slight pink colour which may become darker over time is a normal feature of this reagent and will not affect performance.