

A very fast enzymatic assay for β -D-glucose in beverages, biotechnology and biopharmaceutical applications.

Bulletin Reference	TB – USA – Glucose – Industrial – GMRD-002A – V.01
Order Code(s)	GMRD-002A
Reagent Kit Size(s)	250 ml (360 analyzer cycles for GM8 and GL6, 150 analyzer cycles for GM10)
Instruments	All GM8, GM10 and GL6 Series analyzers
Samples	Any suitable biological fluid or aqueous extract
Sample Volume	10 μ l (25 μ l for GM10)
Analysis Time	20 seconds
Working Range	0.05 - 20 %W/V (for GM8, GL6); 0.20 - 40 %W/V (for GM10)
Reagent Stability	Shelf-life unopened: 18 months stored at 0 - 5°C.
Note	Long-life glucose standards (with preservative) at 1.0, 2.0, 5.0, 8.0 and 20.0 %W/V are available and ordered as required. Other values can be supplied to special order. Sample opacity or turbidity presents no problem since the detection method is electrochemical rather than spectrophotometric.

Principle

In the presence of molecular oxygen, β -D-glucose (GOD) is oxidised by the enzyme glucose oxidase to gluconic acid and hydrogen peroxide,



Under the conditions of the assay, the rate of oxygen consumption is directly proportional to glucose concentration.