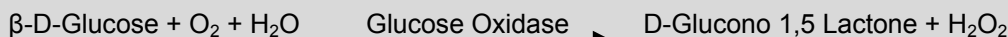


E2030806P1 Glucose Oxidase



PRODUCT APPLICATION

Glucose oxidase has been successfully used in desktop glucose detection instrumentation and the detection of glucose in diabetic patients.

Also used for glucose detection in blood, food analysis and in the construction of disposable electrochemical biosensors and in vivo biosensors.

PRODUCT BENEFITS

Highly purified salt-free freeze dried powder, particularly useful for biosensor applications. Unstabilised GOX is a more economical viable product in our range.

STABILITY

Stable for 1 year at -20°C

STABILISER INFORMATION

This enzyme can be stabilised using Q2090625D15 stabiliser solution from Applied Enzyme Technology Ltd.

The solution is delivered in double strength to be added to the unstabilised enzyme in buffer solution. For more information on our range of stabiliser solutions please contact our sales representative.

¹ The enzymes, Vol XII B, P.421 (P.D.Boyer, ed Academic Press (1975);

² Method in enzymology, Vol IX, p. 82 (S.P.Colowich and N.O.Kaplan,ed.), Academic Press (1966),

³ B.E.P. Swoboda and V. Massay; J.Biol. Chem.,240, 2209 (1965).

PHYSICAL PROPERTIES

| | |
|-------------------------------|---|
| Glucose Oxidase | EC:1.1.3.4 |
| Source | Aspergillus niger |
| Appearance | Dry yellow powder |
| Form supplied | Dry unstabilised powder |
| Activity | > 250 Units per mg material |
| Protein concentration | >0.75 mg prot/mg mat (Lowry) |
| Isoelectric point | 7.0 |
| Molecular Mass ^{1,2} | Approx. 153 kDa (gel filtration) |
| pH stability | 7.0 |
| Contaminants | Amylase, Saccharase and Maltase less than 0.5% < 0.035U/mg material Catalase |
| Storage | -20°C |
| Quality Control | Activity determined by spectrophotometric assay |

| | |
|---|---|
| Unit Definition | One unit is defined as the amount of enzyme utilising 1 μmole of glucose per minute at 25°C and pH 7.0 . |
| Substrate specification: (Km in M) ³ | 3.3 x 10^{-2}M - $\beta\text{-D-Glucose}$ 6.1 x 10^{-2}M - 2-Deoxyglucose |

SAFETY AND HANDLING

Read the Material Safety Data Sheets (MSDS) and product labels before using the products.

Issued by Gwent Group May 2010

All values reported here are results of experiments conducted in our laboratories and are intended to illustrate the products performance. They are not intended to represent the products specifications