

# GOD(AN)

Glucose oxidase EC 1.1.3.4

*from Aspergillus niger*

## Reaction Equation



## Specification

### Specific Activity

U/mg protein > 350 units

### Contaminants

Amylase < 0.01%

Invertase < 0.01%

Catalase < 0.5%

## Assay Procedure

### I Spectrophotometric Method

Wavelength : 436 nm, Light path length : 1 cm

Temperature : 25°C

Pipette the following reagents into a cuvette

|         |  |
|---------|--|
| 3.00 mL | Potassium phosphate buffer<br>(0.1 mol/L, pH 6.0)<br>containing o-Dianisidine (5.5 mg/100 mL)<br>$\beta$ -D-Glucose (9.0 g/100 mL) |
| 0.01 mL | POD (10 mg/mL)   |
| 0.02 mL | GOD solution in phosphate buffer<br>(0.1 mol/L, pH 7.5) (1 - 2.5 U/mL)   |

### II Calculation

$$\frac{\Delta A/\text{min} \cdot V \cdot D}{8.7 \cdot d \cdot v} = \text{U/mL}$$

$\Delta A/\text{min}$  = The change in absorbance at 436 nm/minute

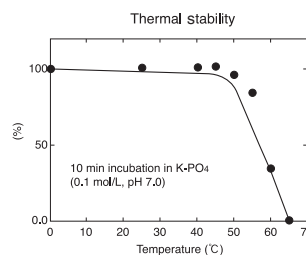
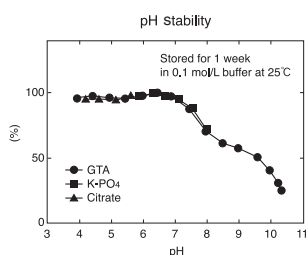
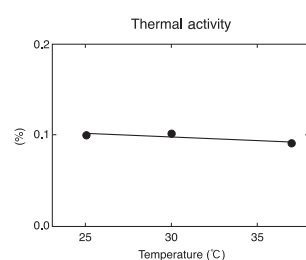
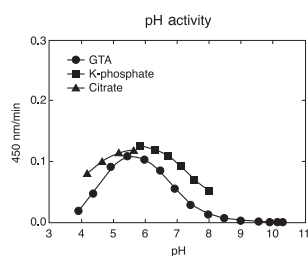
V = Total volume of reaction mixture (3.03 mL)

8.7 = mmol/L extinction coefficient of o-Dianisidine  
( $\text{L} \cdot \text{mmol}^{-1} \cdot \text{cm}^{-1}$ )

d = Light path length (1 cm)

v = Volume of enzyme sample (0.02 mL)

## Reference Data



## Preparation and Storage

Lyophilized powder

Store below -20°C

## Cat. No./Package

| Cat. No. | Package      |
|----------|--------------|
| 46524003 | 3,000 units  |
| 46526003 | 10,000 units |
| 46527003 | 50,000 units |

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