



**Peroxidase RZ 2.0**  
**Catalogue No. PERO-70-6915**

**Origin:** ex horseradish

**Specifications:**

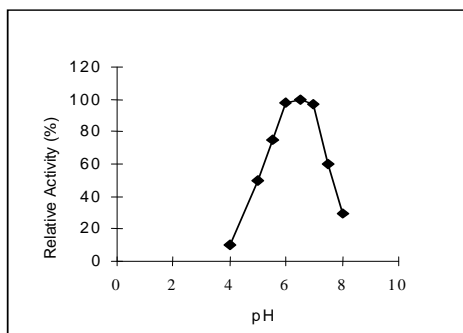
Appearance: Reddish-brown , Lyophilised powder  
 Activity: >200 PPG U/mg powder at 20°C  
 RZ >2.0

**Characteristics:**

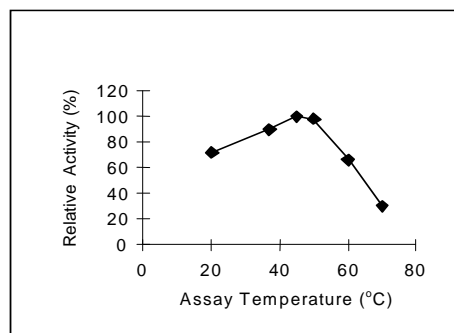
Molecular Weight:	40 kDa (gel filtration)	
Isoelectric point:	7.2	
Optimum pH:	6.0 - 6.5	Fig. 1
Optimum temperature:	40°C	Fig. 2
pH stability:	5.0 -10.0 (25°C, 24 hr)	Fig. 3
Thermal stability:	10 min, pH 7.0	Fig. 4
Lyophilised stability:	1 year at -20°C	

All characteristics determined by the Guaiacol Assay Procedure at 20°C, pH 7.0.

**Fig. 1** pH Optimum

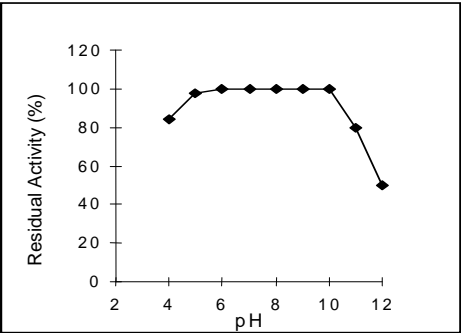


**Fig. 2** Temperature Optimum

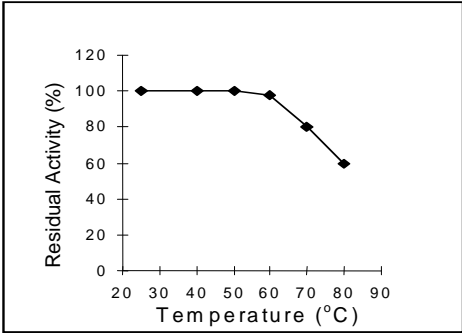




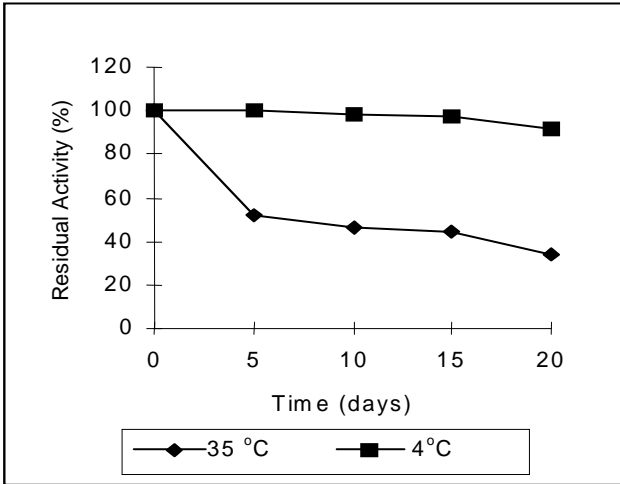
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**Fig. 3 pH stability**  
solution  
pH 3.0 – 5.0 Citrate buffer  
pH 6.0 – 8.0 Phosphate buffer  
pH 9.0 – 11.0 Glycine buffer



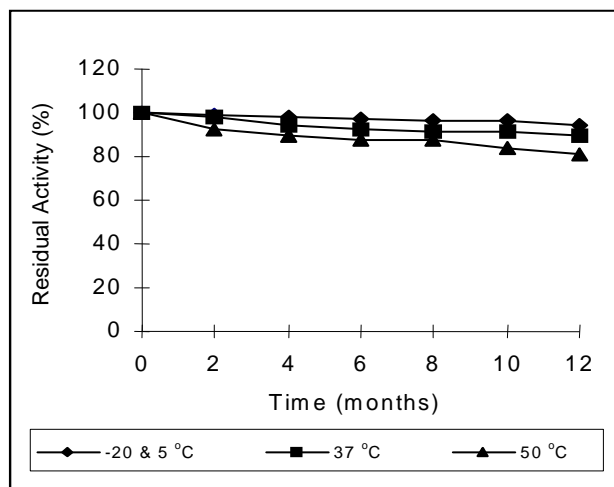
**Fig. 4 Temperature stability of POD**  
POD solution in 50 mM phosphate buffer pH 7.0,  
10 min incubation



**Fig. 5 Liquid stability at 4°C and 35°C**  
POD Solution in 50mM phosphate buffer pH 7.0  
0.1% sodium azide



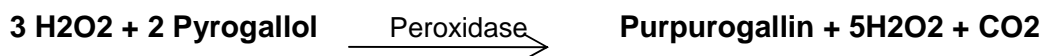
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**Fig. 6** Dry powder stability at  $-20^{\circ}\text{C}$ ,  $5^{\circ}\text{C}$ ,  $37^{\circ}\text{C}$  and  $50^{\circ}\text{C}$

**Assay Principle:**

Peroxidase Catalyses the following reaction:



The formation of purpurogallin is measured spectrophotometrically by measuring the rate of its absorbance at 420 nm.

**Unit Definition:**

One unit of activity is defined as the amount of enzyme that will catalyse the production of 1 mg of purpurogallin from pyrogallol in 20 seconds at  $20^{\circ}\text{C}$  under standard assay method conditions.

*(See Analytical Method for full details)*

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