



## Uricase Catalogue No. 70-1711-01

**Origin:** *Candida utilis*

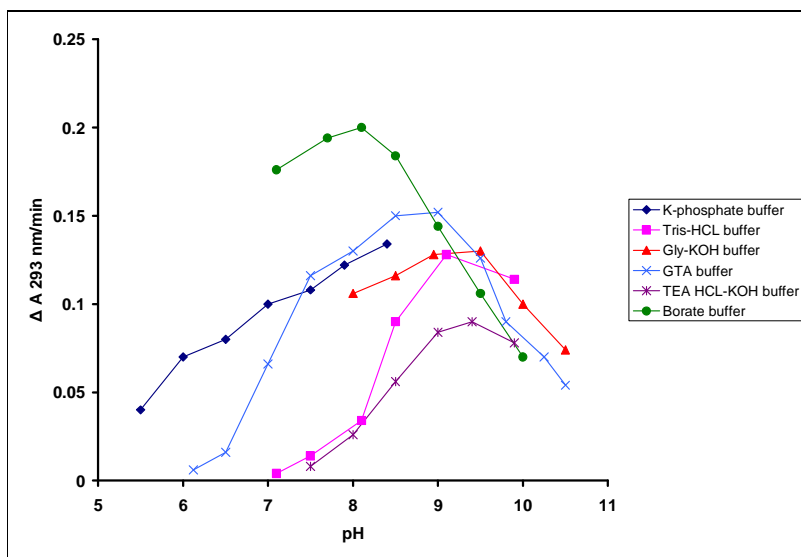
### Specifications:

Appearance: White to off white free flowing powder  
Specific Activity: > 6 U/mg protein at 25°C

### Characteristics:

Molecular weight:	120k Da (Gel Permeation Chromatography) 32-35 kDa (SDS-PAGE)	
Isoelectric point:	5.6	
Optimum pH:	7.5 – 9.5	See Fig.1
pH Stability:	6.5 – 11 (5°C, 1 week)	See Fig.2
Optimum Temperature:	Above 35°C	See Fig.3
Thermal Stability:	Below 50°C (pH 8.5, 10 min)	See Fig.4
Lyophilised Stability:	Stable for 12 months desiccated at -20°C	

**Fig. 1** Effect of various buffer solutions on Uricase Activity

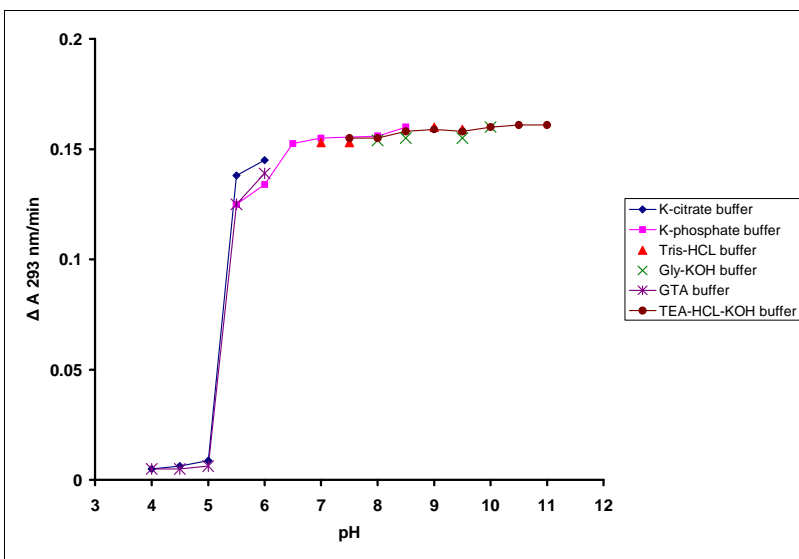


(80mM buffer, 0.125mM Urate)



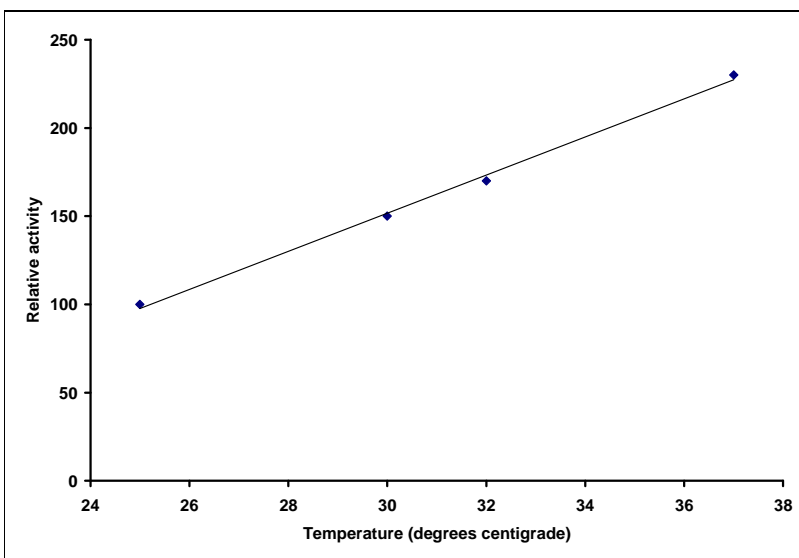
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**Fig. 2** pH Stability



Stored at 5°C for 1 week in 100mM buffer  
(80mM Borate buffer (pH 8.5), 0.125mM Urate)

**Fig. 3** Effect of temperature on Uricase activity with borate buffer

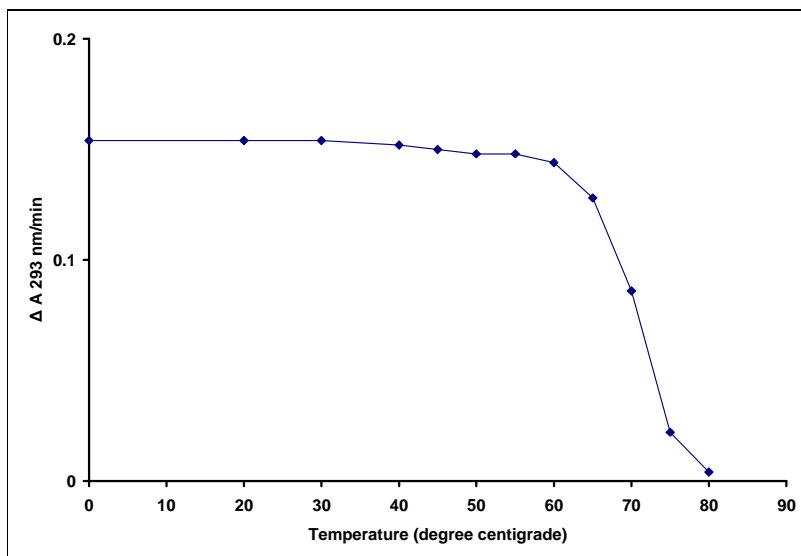


(50mM Borate buffer (pH 8.5), 0.125mM Urate)



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**Fig. 4 Thermal Stability**



(10 minute incubation in 50mM borate buffer, pH 8.5, 0.1mM Uric acid)

### Assay Principle:

Uricase catalyses the following reaction:



As uric acid degrades there is a decrease in absorbance which can be measured spectrophotometrically at 290nm.

### Unit Definition:

One unit of activity is defined as the amount of enzyme that will transform 1.0 micromole of substrate per minute at 25°C under standard assay method conditions.

*(See Analytical Method for full details)*

**International**  
50 Gibson Drive  
Kings Hill, West Malling  
Kent, ME19 4AF, UK  
Phone: +44 (0) 1732 220022  
Fax: +44 (0) 1732 220024/5

**The Americas**  
31 New York Avenue  
Framingham, MA  
01701-9322  
Phone: 800 332 1042  
Fax: 800 762 6311