



DATE: 3/11/05

**DETERMINATION OF FRUCTAN (HEXOKINASE METHOD)**

Sample	Weight (mg)	Volume (ml)	Absorbance/blank (UV <sub>340nm</sub> , A)	Absorbance/reaction (UV <sub>340nm</sub> , A <sub>2</sub> -)	ΔA = Reaction - blank (UV <sub>340nm</sub> , A <sub>2</sub> -A <sub>1</sub> )	Fructan (% w/w) 'as is'
1 Fructan Control; 29.3% 'as is'; Lot 70602 (- Fructanase)	200	100	0.175	0.180	0.005	-
2 Fructan Control; 29.3% 'as is'; Lot 70602 (+ Fructanase)	200	100	0.192	0.577	0.385	28.71
3 Reagent blank	-	-	0.152	0.156	0.004	-
4 Fructose Standard - (0.5mg/mL; 0.1 mL)	-	-	0.151	0.825	0.670	0.499 mg/mL fructose

$$\text{Fructose}/100\mu\text{g} = A_2 - A_1 = 0.670; F = 74.63$$

$$\begin{aligned} \text{Fructan (\% w/w, 'as is')} &= \Delta E \times F \times V \times 5 \times 0.9/0.2 \times 100/W \times 1/1000 \times 162/180 \\ &= \Delta E \times F \times V/W \times 2.025 \end{aligned}$$

Comments:.....