

## Iso-Analytical Laboratory Report

### Client Details

*Name:* Your Company  
*Contact(s):* Your Name  
*P.O. No.:* Your Order Code

### Sample Details

*Number:* 11  
*Material:* Fruit extracts

### Sample Tracking

*IA Reference No.:* Our LIMS Code  
*Date of Arrival:* 21st May 2007

### Analysis Details

*Isotope:* Carbon-13  
*Method:* EA-IRMS  
*Report Date:* 22nd May 2007  
*Analyst:* Ian Begley

Sample Code	1st Replicate $\delta^{13}\text{C}_{\text{V-PBD}} (\text{‰})$	2nd Replicate $\delta^{13}\text{C}_{\text{V-PBD}} (\text{‰})$	Mean $\delta^{13}\text{C}_{\text{V-PBD}} (\text{‰})$
P7-1	-24.46	-24.47	-24.47
P7-2	-24.59	-24.53	-24.56
P7-3	-26.15	-26.12	-26.14
P7-4	-22.73	-22.75	-22.74
P7-5	-25.14	-25.07	-25.10
P7-6	-15.66	-15.67	-15.67
P7-7	-19.24	-19.25	-19.25
P7-8	-25.86	-25.96	-25.91
P7-9	-21.82	-21.82	-21.82
P7-10	-18.96	-18.86	-18.91
P7-11	-25.80	-25.77	-25.78

### Quality Control Check Samples

	IAEA-CH-6 (Sucrose) $\delta^{13}\text{C}_{\text{V-PBD}} (\text{‰})$	IA-R005 (Beet Sugar) $\delta^{13}\text{C}_{\text{V-PBD}} (\text{‰})$	IA-R006 (Cane Sugar) $\delta^{13}\text{C}_{\text{V-PBD}} (\text{‰})$
	-10.39	-26.02	-11.67
	-10.42	-26.05	-11.64
	-10.42		
	-10.39		
<b>Mean</b>	-10.41	-26.04	-11.66
<b>St. Dev.</b>	0.02	0.02	0.02
<b>Count</b>	4	2	2
<b>Accepted Value</b>	-10.43	-26.03	-11.64

CONT.

## **Details of Analysis**

2  $\mu\text{L}$  aliquots of fruit extracts were pipetted into tin capsules and dried at 60 °C prior to analysis. Samples, reference materials and control standards were then analysed by continuous flow - isotope ratio mass spectrometry.

## **Reference Standards**

The reference material used during analysis of the samples was to IAEA-CH-6 (sucrose), which has a  $\delta^{13}\text{C}$  value of -10.43 ‰ vs. V-PDB. Reference standards IAEA-CH-6, IA-R005 (Iso-Analytical beet sugar,  $\delta^{13}\text{C} = -26.03$  ‰ vs. V-PDB, traceable to IAEA-CH-6), and IA-R006 (Iso-Analytical cane sugar,  $\delta^{13}\text{C} = -11.64$  ‰ vs. V-PDB, traceable to IAEA-CH-6) were measured for quality control purposes during analysis of the samples. IAEA-CH-6 is distributed as an isotope inter-comparison standard by the International Atomic Energy Agency.

Unless the return of samples is requested, they will be stored at Iso-Analytical for a minimum of 3 months before disposal.

If you require any further information regarding this analysis, please do not hesitate to contact us.

Reported By:

Checked By:

Ian Begley, PhD

Steve Brookes, PhD

Iso-Analytical Limited  
Millbuck Way  
Sandbach  
Cheshire  
CW11 3HT  
UK

Tel.: +44 (0)1270 766771  
Fax.: +44 (0)1270 766709  
E-Mail: [info@iso-analytical.com](mailto:info@iso-analytical.com)