IRMS standards from Elemental Microanalysis

New kelp powder IRMS standard added, expanding our IRMS range

Elemental Microanalysis has recently introduced a new IRMS standard to add to it's comprehensive range – B2224, a kelp powder IRMS standard for ^{13}C, ^{15}N, and ^{34}S analysis, sold in 1 g vials.

The current isotopic and elemental values for B2224 are shown below in the table.

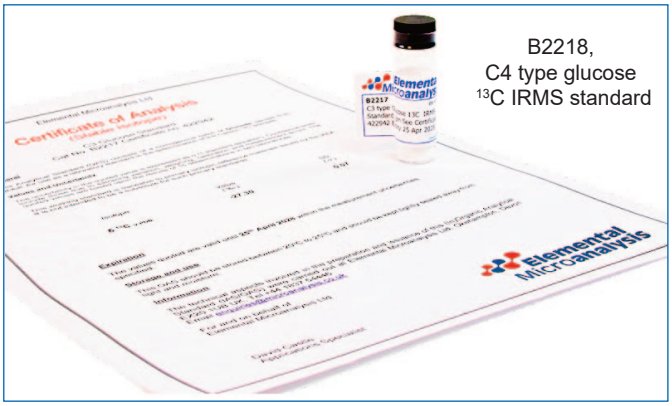
B2224, Kelp powder IRMS standard for CHNOS analysis

B2224, Kelp powder IRMS standard for ^{13}C, ^{15}N, ^{34}S analysis	δ ^{13}C ‰	δ ^{15}N ‰	δ ^{34}S ‰	% C	% H	% N	% O	% S
	-17.90	6.38	21.73	32.74	5.02	1.51	39.17	2.31

IRMS Standards for all your needs

Elemental's full range of IRMS standards includes a wide range of natural materials such as flour, gelatin and soils; various pure chemical standards including silver phosphate and L-alanine; and a range of water standards, including enriched waters. This wide variety of materials allows customers to find a standard that is a suitable match for the matrix of their sample, depending on their field of analysis.

The current isotopic and elemental values for our full range of IRMS standards are shown on the next page.



B2218,
C4 type glucose
^{13}C IRMS standard

IRMS Water standards
B2240 to B2247

These products offer the same high quality and value for money that is typical of Elemental Microanalysis' entire product range.
Available to order from our ISO 9001 factory online, by email, telephone or fax. Elemental Microanalysis offers extensive knowledge of analysis, over 45 years of experience and a worldwide reputation for excellence.

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Part Number	Description	Pack	$\delta^{13}C$ ‰	$\delta^{2}H$ ‰	$\delta^{15}N$ ‰	$\delta^{18}O$ ‰	$\delta^{34}S$ ‰	% Carbon	% Hydrogen	% Nitrogen	% Oxygen	% Sulfur	% TOC	$\delta^{13}C$-TOC ‰
Interlaboratory Comparison Isotopic Standards[1]														
B2203	IRMS standard EMA P1	3 g	-27.85	-25.30		20.99	-3.01	61.51	3.46		20.87	13.85		
B2205	IRMS standard EMA P2	3 g	-28.19	-87.80	-1.57	26.88		68.35	2.90	7.46	19.91			
B2207	Silver phosphate IRMS standard	1 g				21.7								
B2214	Carrara marble powder IRMS standard	0.5 g	2.10			-2.01								
Isotopic Standards[2]														
B2153	Low organic content soil IRMS standard OAS/isotope	5 g	-22.88		5.78			1.86		0.122		0.012		
B2155	Protein IRMS standard OAS/isotope	5 g	-26.98		6.28		6.18 *	46.5		13.32		0.75		
B2157	Wheat flour IRMS standard OAS/isotope	5 g	-27.21		2.73		-2.38	39.38		1.36		0.092		
B2159	Sorghum flour IRMS standard OAS/isotope	5 g	-13.78		1.58		10.11	41.26		1.47		0.095		
B2161	Alfalfa ^{13}C, ^{15}N IRMS standard OAS/isotope	5g	-28.32		0.38			42.88		3.20		0.270		
B2172	Olive oil isotopic standard for ^{13}C	5 g	-29.06											
B2174	Urea isotopic standard for ^{13}C, ^{15}N	5 g	-43.99		-0.82									
B2213	Spruce (wood) powder IRMS standard for ^{15}N, ^{13}C & ^{18}O	3 g	-25.44		-4.9	23.59		49.88	6.29	0.09	42.93			
B2215	Gelatin IRMS standard certified for ^{13}C, ^{15}N, ^{34}S	2 g	-22.98		4.59		0.69	43.18	6.97	16.33		0.41		
B2216	Caffeine IRMS standard certified for ^{13}C, ^{15}N	0.5 g	-32.63		-3.29			49.48	5.16	28.83	16.47			
B2217	C3 type glucose ^{13}C IRMS standard	1 g	-27.30					39.96						
B2218	C4 type glucose ^{13}C IRMS standard	1 g	-11.45					39.96						
B2219	Coldwater fish gelatin IRMS standard certified for ^{13}C, ^{15}N, ^{34}S	2 g	-16.33		14.71		17.05	42.93	6.86	16.63		0.43		
B2222	Bovine gelatin powder IRMS standard certified for ^{13}C, ^{15}N, ^{34}S	2 g	-11.11		7.54		6.79	43.73	6.91	16.10		0.43		
B2223	L-alanine IRMS standard ^{13}C, ^{15}N	0.5 g	-10.60		-2.07									
B2224	Kelp powder IRMS standard for ^{13}C, ^{15}N, ^{34}S analysis	1 g	-17.90		6.38		21.73	32.74	5.02	1.51	39.17	2.31		
B2251	Synthetic high organic content sediment IRMS standard for TC, TOC, N, S	5 g	-24.41		0.58		6.46	7.39		0.566		0.605	7.07	-25.95
Water Isotopic Standards														
B2240	^{2}H & ^{18}O Antarctic water IRMS standard	30 ml		-447.88		-65.95								
B2241	^{2}H & ^{18}O Arctic water IRMS standard	30 ml		-251.56		-37.33								
B2242	^{2}H & ^{18}O Greenland water IRMS standard	30 ml		-111.23		-15.3								
B2243	^{2}H & ^{18}O Icelandic water IRMS standard	30 ml		-50.11		-7.05								
B2244	^{2}H & ^{18}O desert water IRMS standard	30 ml		0.86		0.43								
B2245	^{2}H & ^{18}O slightly enriched water IRMS standard	30 ml		79.69		10.28								
B2246	^{2}H & ^{18}O moderately enriched water IRMS standard	30 ml		1348.78		70.93								
B2247	^{2}H & ^{18}O very enriched water IRMS standard	30 ml		2505.97		248.43								

Notes
1. Interlaboratory Comparison Isotopic Standards – values derived through an international study involving 6 to 25 laboratories.
2. Isotopic Standards – values derived from data from two or more instruments on two or more runs on different days.
* Values given for information only.

Certified values vary from batch to batch - please refer to the analysis certificate on our website for values of current batch.

Elemental Microanalysis®