

Infant/Adult Nutritional Formula II (milk/whey/soy-based)

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| Art. ID | NIST-1869 |
| Unit | 10 pouches x 10 g each |
| Deliverydetails | Dry ice shipment /not restricted |

Description

This Standard Reference Material (SRM) is intended primarily for evaluation of methods for determining proximates, fatty acids, cholesterol, vitamins, carotenoids, elements, amino acids, nucleotides, and chlorate in infant and adult nutritional formulas and similar materials. This SRM can also be used for quality assurance when assigning values to in-house reference materials. The SRM is a soy, whey, and milk protein concentrate-based, hybrid infant/adult nutritional powder prepared by a manufacturer of infant formula and adult nutritional products. A unit of SRM 1869 consists of 10 packets, each containing approximately 10 g of material. /// Sample value(s) - please see attached certificate also for reference values (Vitamins, Carotenoids, and myo-Inositol, Fatty Acids as Free Fatty Acids, Amino Acids and Taurine)

| Text/Information | Analyte/Parameter | CAS number | Concentration/Value | Unit | Method | Source |
|-----------------------------------|-------------------|-------------|---------------------|-------|---|--------|
| Certified Mass Fraction Values | Calcium (Ca) | [7440-70-2] | 4560 ± 130 | mg/kg | NIST ICP-O ES/ Collab orating la boratories / Manufact urer/LACOM ET FAAS | |
| Certified Mass Fraction Values | Copper (Cu) | [7440-50-8] | 19,00 ± 0,38 | mg/kg | NIST ICP-O ES/ Collab orating la boratories / Manufact urer | |
| Certified Mass Fraction Values | Chlorine (Cl) | [7782-50-5] | 5130 ± 130 | mg/kg | NIST ICP-O ES/ Collab orating la boratories / Manufact urer | |
| Certified Mass Fraction Values | Chromium (Cr) | [7440-47-3] | 0,859 ± 0,066 | mg/kg | Collaborat ing labora tories/ Ma nufacturer / NIST ICP -MS | |

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| Certified Mass Fraction Values | Iodine (I) | [7553-56-2] | 1,28 ± 0,15 | mg/kg | Collaborating laboratories/ Manufacturer / NIST ICP-MS |
| Certified Mass Fraction Values | Iron (Fe) | [7439-89-6] | 164,7 ± 3,7 | mg/kg | NIST ICP-OES/ Collaborating laboratories / Manufacturer |
| Certified Mass Fraction Values | Magnesium (Mg) | [7439-95-4] | 947 ± 10 | mg/kg | NIST ICP-OES/ Collaborating laboratories / Manufacturer/LACOMET FAAS |
| Certified Mass Fraction Values | Manganese (Mn) | [7439-96-5] | 46,0 ± 1,6 | mg/kg | NIST ICP-OES/ Collaborating laboratories / Manufacturer |
| Certified Mass Fraction Values | Molybdenum (Mo) | [7439-98-7] | 1,612 ± 0,047 | mg/kg | Collaborating laboratories/ Manufacturer / NIST ICP-MS |
| Certified Mass Fraction Values | Phosphorus (P) | [7723-14-0] | 4186 ± 57 | mg/kg | NIST ICP-OES/ Collaborating laboratories / Manufacturer |
| Certified Mass Fraction | Potassium (K) | [7440-09-7] | 7560 ± 110 | mg/kg | NIST ICP-O |

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|--------------------------------|---------------------------|-------------|---------------|-------|---|
| Values | | | | | ES/ Collaborating laboratories / Manufacturer/LACOM ET FAAS |
| Certified Mass Fraction Values | Selenium (Se) | [7782-49-2] | 0,806 ± 0,083 | mg/kg | Collaborating laboratories/ Manufacturer / NIST ICP-MS |
| Certified Mass Fraction Values | Sodium (Na) | [7440-23-5] | 1877 ± 53 | mg/kg | NIST ICP-OES/ Collaborating laboratories / Manufacturer/LACOM ET FAAS |
| Certified Mass Fraction Values | Zinc (Zn) | [7440-66-6] | 144,0 ± 3,2 | mg/kg | NIST ICP-OES/ Collaborating laboratories / Manufacturer |
| Certified Mass Fraction Values | Ascorbic acid (Vitamin C) | [50-81-7] | 897 ± 43 | mg/kg | NIST LC-absorbance/ Collaborating laboratories/ Manufacturer |
| Certified Mass Fraction Values | Thiamine (Vitamin B1) | [59-43-8] | 13,36 ± 0,32 | mg/kg | Collaborating laboratories/ Manufacturer / NIST ID-LC-MS/MS |
| Certified Mass Fraction | Riboflavin (Vitamin B2) | [83-88-5] | 13,6 ± 1,5 | mg/kg | Collaborat |

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| Values | | | | | ing labora tories/ Ma nufacturer / NIST ID- LC-MS/MS |
| Certified Mass Fraction Values | Niacinamide (Vitamin B3) | [98-92-0] | 98,4 ± 2,2 | mg/kg | Collaborat ing labora tories/ Ma nufacturer / NIST ID- LC-MS/MS |
| Certified Mass Fraction Values | Total Vitamin B3 as Niacinamide | [98-92-0] | 99,5 ± 4,4 | mg/kg | Collaborat ing labora tories/ NI ST ID-LC-M S/MS |
| Certified Mass Fraction Values | Pantothenic Acid (Vitamin B5) | | 64,9 ± 6,6 | mg/kg | Collaborat ing labora tories/ Ma nufacturer / NIST ID- LC-MS/MS |
| Certified Mass Fraction Values | Pyridoxine (Vitamin B6) | [65-23-6] | 13,09 ± 0,32 | mg/kg | Collaborat ing labora tories/ Ma nufacturer / NIST ID- LC-MS/MS |
| Certified Mass Fraction Values | Biotin | [58-85-5] | 1,89 ± 0,24 | mg/kg | Collaborat ing labora tories/ Ma nufacturer / NIST ID- LC-MS/MS |
| Certified Mass Fraction Values | Total Choline | | 1612 ± 64 | mg/kg | Collaborat ing labora tories/ Ma nufacturer |

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| Certified Mass Fraction Values | Free Carnitine | | 103,5 ± 4,5 | mg/kg | Collaborating laboratories/ Manufacturer |
| | | | | | / NIST ID- LC-MS/MS |
| Certified Mass Fraction Values | Cholesterol | [57-88-5] | 0,1302 ± 0,0047 | mg/kg | Collaborating laboratories/ NIST-ID-GC-MS |