| Fapas® REFERENCE MATERIAL DATA SHEET | TYG050RM |
|---|---|
| Matrix | Infant Formula |
| Weight / Volume of Contents | 50 g |
| Description of material: The material was prepared from a commercially available infant formula.  All analytes were present at natural levels. | |

| Analyte | Reference Value | Expanded uncertainty *U* (k = 2) | Units | No. of data points producing Reference Value |
|---|---|---|---|---|
| Calcium (Ca) | 2830 | ± 40 | mg/kg | 70 |
| Copper (Cu) | 4.11 | ± 0.09 | mg/kg | 57 |
| Iodine (I) | 1196 | ± 78 | µg/kg | 23 |
| Iron (Fe) | 50.1 | ± 0.7 | mg/kg | 71 |
| Magnesium (Mg) | 504 | ± 7 | mg/kg | 60 |
| Manganese (Mn) | 1.09 | ± 0.03 | mg/kg | 46 |
| Phosphorus (P) | 1673 | ± 29 | mg/kg | 56 |
| Potassium (K) | 4734 | ± 72 | mg/kg | 54 |
| Selenium (Se) | 143 | ± 8 | µg/kg | 36 |
| Sodium (Na) | 1841 | ± 24 | mg/kg | 70 |
| Zinc (Zn) | 51.1 | ± 1.0 | mg/kg | 61 |

| Date reference values were generated | 20/11/2019 |
|---|---|
| Reference values are valid until | 20/11/2021 |
| Recommended storage conditions on receipt | -20 °C |
| This material was approved on behalf of Fapas® by | Joe Holland |

Notes

- Mix the reference material thoroughly before taking a representative analytical sample.  It is intended to be used as a single-analysis sample (plus confirmation) for analytical quality control purposes, method verification and as a characterised positive control sample.  The recommended minimum analytical sub-sample size is 0.5 g

- This is a reference material, not a certified reference material.

- This reference material has been produced according to the principles of ISO 17034:2016.

- The characterised reference values have been derived from the results consensus of ISO 17025 accredited laboratories in an interlaboratory comparison, using a variety of methods.  The traceability is inherent in the accreditation status of the results used.

- The Expanded Uncertainty *U* corresponds to a confidence level of about 95%.  *U* has been derived from the observed standard deviation of the consensus data (the major component) plus contributions from homogeneity and stability studies.  *U* corresponds to real-world uncertainty of the analysis in a food matrix, not of a pure substance.

- The stability of the reference material has been established from a formal study.  The stability components combine long term (ideal storage) and short term stability (transportation) conditions. The validity date may be extended if supporting data becomes available.