

Fapas® REFERENCE MATERIAL DATA SHEET	TYG080RM
Matrix	Milk Powder
Weight / Volume of Contents	50 g
Description of material: The material was prepared from a commercially available milk powder. 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)	1286	± 24	mg/100g	38
Iodine (I)	3.01	± 0.11	mg/kg	17
Magnesium (Mg)	1171	± 26	mg/kg	35
Phosphorus (P)	997	± 19	mg/100g	25
Potassium (K)	1643	± 28	mg/100g	32
Selenium (Se)	185	± 13	$\mu\text{g/kg}$	22
Sodium (Na)	413	± 8	mg/100g	35
Iron (Fe)	2.03	± 0.20	mg/kg	23
Copper (Cu)	0.50	± 0.04	mg/kg	25
Zinc (Zn)	41.1	± 0.7	mg/kg	27
Manganese (Mn)	0.260	± 0.011	mg/kg	18
Molybdenum (Mo)	0.340	± 0.020	mg/kg	11

Date reference values were generated	15/10/2020
Reference values are valid until	15/10/2022
Recommended storage conditions on receipt	-20 °C
This material was approved on behalf of Fapas® by	Joe Holland

Notes
<ul style="list-style-type: none"> 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 0.5g. 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.