

Fapas® REFERENCE MATERIAL DATA SHEET	TYG076RM
Matrix	Tomato Paste
Weight / Volume of Contents	50 g
Description of material: The material was procured from a retail source. All analytes were spiked to fortify naturally occurring levels present in the material.	

Analyte	Reference Value	Expanded uncertainty $U$ ( $k = 2$ )	Units	No. of data points producing Reference Value
Cadmium (Cd)	254	$\pm 25$	$\mu\text{g/kg}$	62
Iron (Fe)	126	$\pm 12$	$\text{mg/kg}$	39
Lead (Pb)	408	$\pm 43$	$\mu\text{g/kg}$	63
Tin (Sn)	162	$\pm 16$	$\text{mg/kg}$	45

Date reference values were generated	09/09/2020
Reference values are valid until	09/09/2022
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 1 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 majority of the results used to generate the reference value were determined using ICP MS, following microwave digestion in nitric acid.
- 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.