

Fapas® REFERENCE MATERIAL DATA SHEET	TYG058RM
Matrix	Soft Drink
Weight / Volume of Contents	50 ml
Description of material: The material was prepared from lemonade procured from a retail source. All analytes were spiked into the test material.	

Analyte	Reference Value	Expanded uncertainty U ($k = 2$)	Units	No. of data points producing Reference Value
Antimony (Sb)	644	± 17	$\mu\text{g/l}$	30
Arsenic (As) (total)	780	± 22	$\mu\text{g/l}$	37
Cadmium (Cd)	144	± 4	$\mu\text{g/l}$	39
Chromium (Cr)	804	± 17	$\mu\text{g/l}$	33
Copper (Cu)	735	± 20	$\mu\text{g/l}$	38
Zinc (Zn)	1007	± 47	$\mu\text{g/l}$	31

Date reference values were generated	27/11/2019
Reference values are valid until	27/11/2023
Recommended storage conditions on receipt	+4 °C, dark
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 2 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 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. The previous validity date of this reference material was 27/11/2021.