

FAPAS REFERENCE MATERIAL DATA SHEET	TET019RM
Matrix	Wine
Weight / Volume of Contents	50 ml
Description of material: Red wine spiked with Cadmium (Cd) and Lead (Pb). Copper (Cu) is present at its natural (incurred) level.	

Analyte	Reference Value	Expanded uncertainty $U$ ( $k = 2$ )	Units	No. of data points producing Reference Value
Cadmium (Cd)	92.0	$\pm 5.3$	$\mu\text{g/l}$	21
Copper (Cu)	266	$\pm 20$	$\mu\text{g/l}$	20
Lead (Pb)	156	$\pm 11$	$\mu\text{g/l}$	22

Date reference values were generated	18/02/2015
Reference values are valid until	10/04/2021
Recommended storage conditions on receipt	+4 °C, Dark
This material was approved on behalf of FAPAS by	Mark Sykes

Notes
<ul style="list-style-type: none"> <li>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. The recommended minimum analytical sub-sample size is 2 ml.</li> <li>This is a reference material, not a certified reference material.</li> <li>This reference material has been produced according to the principles of ISO 17034.</li> <li>The reference values have been derived from the results consensus of ISO 17025 accredited laboratories taking part in proficiency test, using a variety of methods. The traceability is inherent in the accreditation status of the results used.</li> <li>The majority of results contributing to the generation of the reference values used nitric acid digestion followed by ICP (MS or OES) determination.</li> <li>The Expanded Uncertainty <math>U</math> corresponds to a confidence level of about 95%. <math>U</math> has been derived from the observed standard deviation of the consensus data (the major component) plus contributions from homogeneity and stability studies.</li> <li>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.</li> <li>The previous validity date of this reference material was 10/04/2019.</li> </ul>