

FAPAS QC MATERIAL DATA SHEET	T1387_CQC
Matrix	Challenge Wine
Weight / Volume of Contents	4 x 250 ml

Analyte	Assigned Value, $X_a$	Range for $ z  \leq 2$	Units	No. of data points producing $X_a$
Volumic Mass at 20°C	0.993	0.992 - 0.994	g/cm <sup>3</sup>	25
Alcoholic Strength (real)	10.7	10.7 - 10.8	% volume	35
Alcoholic Strength (apparent)	10.8	10.5 - 11.0	% volume	8
Methanol	102	84 - 120	mg/l	13
Ethanal (acetaldehyde)	44.4	25.7 - 63.0	mg/l	10
4-Ethyl-Phenol	260	158 - 362	µg/l	7
pH	3.60	3.46 - 3.75	pH units	36
Total Acidity (expressed as tartaric acid)	4.47	4.06 - 4.87	g/l	36
Total Volatile Acidity (expressed as acetic acid)	0.437	0.381 - 0.493	g/l	31
Chloride (expressed as NaCl)	0.0535	0.0441 - 0.0629	g/l	8
Ash	2.80	2.53 - 3.07	g/l	17
Turbidity	0.22	0.11 - 0.33	nfu	18
Colour Intensity	4.90	2.45 - 7.35	(conventional unit)	24
Colour Shade	0.74	0.69 - 0.79	(ratio)	18
Gluconic Acid	0.29	0.15 - 0.44	g/l	11
Lactic Acid	1.47	0.74 - 2.21	g/l	28
Tartaric Acid	1.80	1.26 - 2.34	g/l	21
Glycerol	6.83	5.67 - 7.99	g/l	16
Dry Extract	23.6	21.9 - 25.3	g/l	21
Sulphur Dioxide (free)	23.5	18.8 - 28.1	mg/l	34
Sulphur Dioxide (total)	120	101 - 138	mg/l	38
Calcium	89.0	74.5 - 103.5	mg/l	15
Copper	0.24	0.15 - 0.34	mg/l	26
Iron	2.82	2.05 - 3.60	mg/l	23
Lead	0.015	0.008 - 0.022	mg/l	16
Lithium	24.9	13.9 - 35.8	µg/l	8
Magnesium	85.8	71.8 - 99.8	mg/l	14

Potassium	1.08	0.96 - 1.20	g/l	14
Sodium	27.1	21.9 - 32.4	mg/l	14
Zinc	0.900	0.607 - 1.193	mg/l	19

This data sheet is applicable until	27 Mar 2019
Recommended Storage on receipt	Ambient
Notes	
<ul style="list-style-type: none"> <li>• Mix the QC material thoroughly before taking a representative analytical sample</li> <li>• The assigned value has been derived from the consensus of laboratories taking part in this proficiency test, using a variety of methods. This is not a certified reference value.</li> <li>• The Range for <math> z  \leq 2</math> is the concentration range within the limits of <math>\pm 2</math> z-scores. The assigned value and its range have been established from the proficiency test data and are suitable for use by laboratories as a fit-for-purpose quality control measure.</li> <li>• Stability of the QC material has been established as sufficient for the scope of the proficiency test from previous experience, expert advice and published literature. FAPAS advises that the QC material is analysed within the recommended date. FAPAS QC materials are intended to be used as single-analysis samples.</li> <li>• Full details on the proficiency test procedure used to characterise this QC material are available in the Protocol, Part 1 - Common Principles, freely available to download from the FAPAS website.</li> <li>• You may use any method of analysis you wish.</li> </ul>	